[redacted]ISSION FOR EUROPE

ECONOMIC SURVEY OF EUROPE

2000 No. 2/3

[redacted]

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Geneva

ECONOMIC SURVEY OF EUROPE

2000 No. 2/3

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GENEVA

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UNITED NATIONS
New York and Geneva, 2000

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UNITED NATIONS PUBLICATION

Sales No. E.00.II.E.28

ISBN 92-1-116767-1
ISSN 0070-8712

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Printed at United Nations, Geneva (Switzerland)

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EXPLANATORY NOTES

The following symbols have been used throughout this *Survey*:

.. = not available or not pertinent

– = nil or negligible

* = estimate by the secretariat of the Economic Commission for Europe

| = break in series

In referring to a combination of years, the use of an oblique stroke (e.g. 1998/99) signifies a 12-month period (say, from 1 July 1998 to 30 June 1999). The use of a hyphen (e.g. 1997-1999) normally signifies either an average of, or a total for, the full period of calendar years covered (including the end-years indicated).

Unless the contrary is stated, the standard unit of weight used throughout is the metric ton. The definition of "billion" used throughout is a thousand million. The definition of "trillion" used throughout is a thousand billion. Minor discrepancies in totals and percentages are due to rounding.

References to dollars ($) are to United States dollars unless otherwise specified.

The membership of the United Nations Economic Commission for Europe (UN/ECE) consists of all the states of western Europe, eastern Europe and the territory of the former Soviet Union, North America and Israel.

The term *transition economies*, as used in the text and tables of this publication, refers to the formerly centrally planned economies of the ECE regions. *Eastern Europe* refers to the economies of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia, The former Yugoslav Republic of Macedonia and Yugoslavia. The *Baltic states* refers to Estonia, Latvia and Lithuania and the *CIS countries* refers to Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

ABBREVIATIONS

AIDS	acquired immune deficiency syndrome
CEECs	central and east European countries
CETE	central European transition economies
c.i.f.	cost, insurance and freight
CIS	Commonwealth of Independent States
CMEA	(former) Council for Mutual Economic Assistance
COCOM	Coordinating Committee for Multilateral Export Controls
CPI	consumer price index
DE	domestically-owned enterprise
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
ECU	European currency unit
EIU	Economist Intelligence Unit
EMS	European Monetary System
EMU	Economic and Monetary Union
ERM-2	exchange rate mechanism 2 (replaces the EMS)
ESA	European System of Integrated Economic Accounts
EU	European Union
FDI	foreign direct investment
FIE	foreign investment enterprise
FOMC	Federal Open Market Committee (of the Federal Reserve Board)
G-7	Group of Seven
GDP	gross domestic product
GDR	(former) German Democratic Republic
HICP	Harmonized Index of Consumer Prices
HIV	human immunodeficiency virus
HWWA	Hamburg Institute for Economic Research
IFI	international financial institution
IIF	Institute of International Finance, Inc.
ILO	International Labour Office
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
IT	information technology
NACE	Nomenclature générale des activités économiques dans les Communautés européennes (General Industrial Classification of Economic Activities within the European Communities)
NATO	North Atlantic Treaty Organization
NBER	National Bureau of Economic Research, Inc.
n.e.c.	not elsewhere classified

NIC	newly industrialized country
NMP	net material product
OECD	Organisation for Economic Co-operation and Development
OLS	ordinary least squares
OPEC	Organization of the Petroleum Exporting Countries
OPT	outward processing trade
PPI	producer price index
PPP	purchasing power parity
PSBR	public sector borrowing requirement
RCA	revealed comparative advantage
R&D	research and development
RPIX	retail price index excluding mortgage interest payments
SDR	special drawing right
SETE	south-east European transition economies
SITC	Standard International Trade Classification
SNA	System of National Accounts
SOEs	state owned enterprises
TACIS	Technical Assistance for the Commonwealth of Independent States
UNDP	United Nations Development Programme
UN/ECE	United Nations Economic Commission for Europe
UNICEF	United Nations Children's Fund
UNIDO	United Nations Organization for Industrial Development
USSR	Union of Soviet Socialist Republics
VAT	value added tax

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PREFACE

The present *Survey* is the fifty-third in a series of annual reports prepared by the secretariat of the United Nations Economic Commission for Europe to serve the needs of the Commission and of the United Nations in reporting on and analysing world economic conditions.

Until 1997 the *Economic Survey of Europe* was issued once a year as was the *Economic Bulletin for Europe*, the secretariat's second publication which focused on trade and payments issues. At its 52nd Session, in April 1997, the Commission decided to replace these two publications with an annual *Survey* of several issues. In 1998 and 1999 there were three issues a year but starting in 2000 this was reduced to two, to be published in May and December, respectively.

The Survey continues to be published on the sole responsibility of the Executive Secretary of ECE and the views expressed in it should not be attributed to the Commission or to its participating governments.

The analysis in this issue is based on data and information available to the secretariat in late October 2000.

Economic Analysis Division
United Nations Economic Commission for Europe
Geneva

PART ONE

CURRENT ECONOMIC DEVELOPMENTS AND OUTLOOK

CHAPTER 1

THE ECE ECONOMIES IN AUTUMN 2000

The current situation and outlook in the ECE economies – i.e. in Europe, the CIS and North America – is better than at any time in the last decade. The dynamism of the world economy has stimulated growth in western Europe via foreign trade and the close links between western and central Europe have similarly boosted economic growth in the latter. In western Europe, GDP is expected to increase on average by 3.4 per cent this year and to slow down slightly to about 3 per cent in 2001 as a result of tighter monetary policy, the rise in oil prices and weaker economic growth in the United States. In the latter, "a soft landing", from 5 per cent growth in 2000 to some 3.4 per cent is still the central forecast. In the transition economies economic growth has been much stronger than expected and should average somewhat over 5 per cent in 2000, slowing to just over 4 per cent in 2001. Although there are still large differences among the transition economies, all of them should have positive growth this year and again in 2001. The principal risk to this relatively optimistic outlook would be a more rapid adjustment than currently forecast to the considerable imbalances which have built up in the United States – an abrupt fall in asset prices and the dollar would have negative effects on the rest of the world. The rise in oil prices has also added to uncertainty, but it is assumed that they will fall back to the OPEC target range in early 2001. The risks of an upsurge of inflation in western Europe appear to be very low and there is therefore no need for a further tightening of monetary policy which would unnecessarily threaten economic growth both in western Europe itself and in many of the transition economies.

1.1 The global context and the situation in western Europe

(i) The global context

(a) Overview

The strengthening of global economic activity in 1999 continued in the first half of 2000. In fact, the international business cycle gained more momentum than expected at the beginning of this year and in late summer the forecast for world output growth in[1] 2000 was raised half a percentage point to 4¾ per cent. If achieved, this will be the best performance in a decade. As usual, there is a strong correlation between changes in world output and world trade. The volume of world trade is forecast to increase by some 10 per cent in 2000, up from 5 per cent in 1999.

This favourable performance is due largely to the continued rapid expansion of the United States economy, which has led to a very strong growth in its demand for imports. This, in turn, has contributed to the strengthening of cyclical growth forces in both developed and developing countries and especially to the strong recovery of the Asian economies from the financial crises of 1997.

The growth performance of the Asian emerging economies contrasts with the continuing weak economic performance in Japan. The latter has emerged from recession in the first half of 2000 but a sustained recovery is still not ensured. The main driving force of economic growth has been the recovery of business investment against the backdrop of improving export demand and rising corporate profits. Consumer confidence has strengthened but spending behaviour has remained relatively cautious. In view of the stronger cyclical growth, the Bank of Japan raised the overnight call rate to 0.25 per cent in August 2000, following 17 months of a "zero-interest rate" policy. But falling consumer prices suggest that there are still lingering deflationary pressures, which would suggest the need for a further easing of monetary policy. There are, however, doubts concerning the effectiveness of monetary policy in the presence of interest rates which are already very low (the "liquidity trap" phenomenon). In October 2000, the government announced a new package of fiscal measures to support economic activity – the tenth package in the past decade – which is designed to offset an anticipated shortfall of government spending in the first months of 2001. Government debt has risen rapidly in recent years and now corresponds to some 110 per cent of GDP. This will narrowly circumscribe the scope for expansionary fiscal policy in the future.

---

[1] IMF, *World Economic Outlook* (Washington, D.C.), September 2000.

There has also been a general recovery in Latin America, although economic activity remains weak in a number of countries. Argentina has suffered from a disappointing economic performance against the background of an austerity policy and an erosion of price competitiveness due to the appreciation of the peso which is pegged to the dollar in a currency board.

The considerable dynamism of the world economy, via foreign trade, has also stimulated domestic activity in western Europe and the transition economies of central and eastern Europe. As a result of the closer economic linkages within the region, foreign trade has also led to mutually reinforcing economic growth between western and eastern Europe.

Short-term economic prospects, however, have become more uncertain in recent months and there are increasing indications that the global business cycle may have passed its peak. The reasons for this include the further tightening of monetary policy in the United States and western Europe during the course of 2000 and the unexpectedly sharp and sustained rise in international oil prices.

The increased uncertainty in the macroeconomic environment has also been reflected in greater volatility in the financial markets. Prices in international equity markets, notably for technology stocks, have fallen significantly against a background of weaker than expected corporate sales and earnings in the third quarter of 2000 – a development which continued in October.

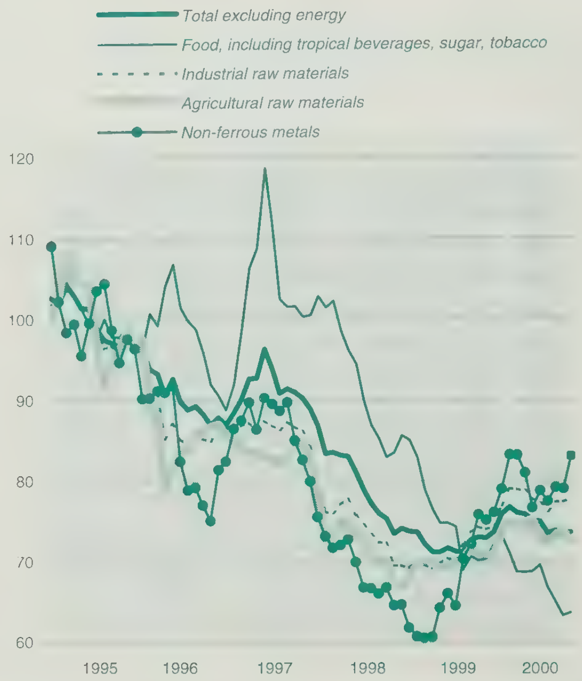
(b) The surge in oil prices

The marked rise in crude oil prices in 1999 continued in the first nine months of 2000 (chart 1.1.1). Oil prices fell briefly in April 2000, but recovered quickly thereafter despite three increases in OPEC production quotas between March and September, which led to an increase in world oil supply of some 14 per cent compared with the beginning of the year.

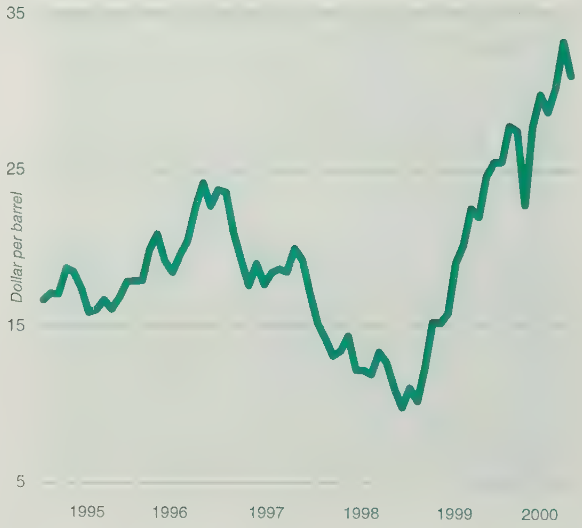
CHART 1.1.1

World commodity prices, January 1995-October 2000
(Indices, dollars)

Non-energy products *(Indices, 1995=100)*



Crude oil *(Brent crude, dollar per barrel)*



Source: Hamburg Institute for Economic Research (HWWA); IMF, *International Financial Statistics*; United States Department of Energy (www.eia.doe.gov).

Note: Average monthly prices. Indices calculated on the basis of current dollar prices. Last observation for non-energy products: September 2000; for crude oil prices: average prices for first four weeks of October 2000

Nevertheless, against a background of low inventories of both crude oil and petroleum products, a tight demand-supply balance (mirrored in a very high utilization rate of global petroleum processing capacity), oil prices (Brent crude) rose to $38 per barrel in early September, a 10-year high. Immediately following the decision of the United States government in late September to release 30 million barrels[2] from its strategic petroleum reserve, and with indications that OPEC stood ready to increase supply, prices fell temporarily to $28 per barrel. But by mid-October, with the lingering crisis in the Middle East, crude oil prices had risen to around $31, an increase of more than 200 per cent compared with the average price of about $10 per barrel in February 1999. The approach of winter in the northern hemisphere and the associated seasonal increase in demand for heating oil has underpinned the high prices. Given that stocks of heating oil have fallen to very low levels in the United States,[3] oil prices are expected to remain high for the rest of 2000 and in early 2001.

---

[2] This corresponds to some 1¾ per cent of the projected United States crude oil demand for the fourth quarter of 2000.

The sharp rise in oil prices has led to a deterioration in the terms of trade of the oil importing countries and a loss in real incomes. This, in turn, will restrain the growth of domestic demand, other things being equal. To some degree, the adverse terms of trade effect will be offset by the rise in import demand from the oil exporting countries made possible by the surge in their oil revenues. But this will also depend on their absorptive capacity and other economic policy priorities such as foreign debt reduction and their need to rebuild foreign reserves.

It is important, however, to put the recent surge in oil prices into perspective. During the first oil price shock, the oil price (Brent crude) rose on average by 204 per cent between 1973 and 1974. During the second oil shock, there was a cumulative increase in prices by 166 per cent in 1980 compared with 1978. The recent surge in oil prices is likely to imply an average increase of some 125 per cent in 2000 compared with 1998. It should also be stressed that oil prices had fallen sharply to an exceptionally low level in 1998 as a result of the pronounced global economic slowdown. The average price in 1998 was $12.7 per barrel compared with an average of $19 in the period 1990-1997. Thus, the low prices of 1998 constituted a large windfall gain for oil importers which could not – and should not – have been expected to last for long.

In any case, the economic effects of the current price shock are much reduced compared with the previous ones not only because the price increase itself is much smaller but also because, under the impact of the first two shocks, higher taxation of energy products and the introduction of more efficient production technologies, there has been a decline in energy intensity (i.e. the use of energy per unit of real GDP) in the industrialized countries by about 50 per cent since the mid-1970s.

Model simulations suggest that an increase in oil prices by $10 per barrel could reduce the growth rate of real GDP in the industrialized countries, on average, by about 0.4 of a percentage point.[4] The adverse effect will be significantly larger, however, for the oil-importing developing countries. The average oil price for the first 10 months of 2000 was somewhat more than $28, an increase of some $10 over the preceding year. For the euro area, however, the price effect will be amplified by depreciation of the euro against the dollar, which could amount to some 12.5 per cent on average in 2000.

In contrast to developments in the international oil markets, prices for non-energy commodities have so far remained relatively subdued in the course of 2000, despite the robust global economic recovery (chart 1.1.1). In the main, this reflects the slow adjustment of supply to the fall in demand in 1997-1998 and ongoing investments in perennial crops and in new metal plants. As a result, there is on overhang of stocks which limits the scope for price increases. This problem has been especially severe for food (including tropical beverages and sugar) for which prices have fallen in the course of this year. Prices of non-ferrous metals and agricultural raw materials were broadly stable in 2000 after recovering from the trough of 1998-1999.

(c) United States

In the United States, economic activity continued to increase at a brisk rate in the first half of 2000 with demand outpacing supply as in recent years. But the rate of expansion slowed down more abruptly than expected in the third quarter. Real GDP rose by only 0.7 per cent compared with the preceding quarter, when it increased by 1.4 per cent (table 1.1.1). Although stronger than expected, this slowdown is broadly in line with general expectations that the economy is poised for a "soft landing" after a long period of buoyant growth. The weakening of economic activity reflects in the main the lagged effects of tighter monetary policy, the loss of real income due to the rise in oil prices, and the strong dollar. The cyclical downturn had already been signalled by the Purchasing Managers' Index which fell below the threshold of 50 per cent in August and September (chart 1.1.2). Also the composite leading indicators have been declining since May and capacity utilization rates in manufacturing industry fell slightly in the third quarter of 2000.

The slowdown of economic growth in the third quarter reflects a pronounced weakening of total domestic demand, especially of fixed investment and a decline in government expenditures. Business investment in equipment and software remained strong but the buoyancy of the two preceding quarters was no longer present. Residential investment fell sharply compared with the second quarter and the growth of expenditures on industrial buildings slowed down to near stagnation. Changes in inventory accumulation provided only minor support to domestic demand after contributing significantly to economic growth in the second quarter. Private consumption was the mainstay of economic growth in the third quarter, reflecting a rebound in demand for consumer durables. A slowdown in real disposable income was more than offset by a fall in savings. The savings ratio became negative (-0.2 per cent), down from an already very low 0.3 per cent in the second quarter. Consumer confidence rose to an all-time high at the beginning of 2000 but was quite volatile thereafter, although remaining at a very high level (chart 1.1.2).

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[3] These low stock piles reflect partly low refining margins until early 2000. Also, tight capacity in the presence of a very strong demand for gasoline during the summer 2000 prevented the usual build-up of heating oil inventories ahead of winter.

[4] IMF, op. cit., p. 9. The OECD estimates that a $10 oil price increase will reduce real GDP by a cumulative 0.4 of a percentage point over two years after the shock in the United States and western Europe. The impact is about twice as large (0.9 of a percentage point) in Japan. OECD, *Economic Outlook* (Paris), December 1999, p. 9, box I.2.

TABLE 1.1.1

Quarterly changes in real GDP, 1999 QIII-2000 QIII
(Percentage change)

	Over preceding quarter					*Over same period of preceding year*				
	1999		*2000*			*1999*		*2000*		
	QIII	*QIV*	*QI*	*QII*	*QIII*	*QIII*	*QIV*	*QI*	*QII*	*QIII*
France	1.0	1.0	0.7	0.7	..	3.1	3.4	3.5	3.4	..
Germany	0.9	0.8	0.8	1.1	..	1.6	2.4	2.3	3.6	..
Italy	0.7	0.5	1.1	0.3	..	1.3	2.2	3.0	2.6	..
United Kingdom	1.0	0.7	0.5	0.9	0.7	2.3	2.9	3.0	3.2	2.9
4 countries above	0.9	0.7	0.8	0.8	..	2.0	2.7	2.9	3.2	..
Canada	1.6	1.2	1.2	1.1	..	5.2	4.9	5.0	5.3	..
United States	1.4	2.0	1.2	1.4	0.7	4.3	5.0	5.3	6.1	5.3
Japan	-1.0	-1.6	2.5	1.0	..	1.0	-0.2	0.7	0.8	..
7 major economies	0.8	0.9	1.3	1.1	..	3.0	3.3	3.7	4.2	..
Memorandum items:										
Euro area	0.9	0.9	0.9	0.8	..	2.4	3.1	3.3	3.5	..
European Union	0.9	0.9	0.9	0.8	..	2.4	3.0	3.2	3.4	..
Western Europe	0.9	0.9	0.8	0.8	..	2.3	3.0	3.2	3.5	..

Source: National statistics.

Note: Data are seasonally adjusted. Euro area: excludes Ireland, Luxembourg and Portugal. European Union: euro area plus Denmark, Sweden and United Kingdom. Western Europe: EU, Norway and Switzerland.

Export growth has remained very strong, with the demand effects associated with the global economic upturn more than offsetting the loss in price competitiveness due to the strong dollar. The growth of imports slowed down somewhat in the third quarter but the rate of expansion (an increase by more than 3 per cent over the preceding quarter) was still quite high. Changes in real net exports subtracted only ¼ of a percentage point from economic growth in the third quarter, down from about 1 percentage point in the two preceding quarters.

Inflation has edged upwards in the course of 2000, mainly because of higher energy prices. Core inflation (which excludes prices of food and energy) remained quite moderate during the first eight months but edged up noticeably in September. The annual inflation rate was 3.5 per cent in September, while core inflation was 2.6 per cent, compared with 1.9 per cent at the beginning of the year. Domestic inflationary pressures have remained moderate, with no signs of labour costs accelerating despite very tight labour markets. Higher labour costs have so far continued to be offset by sizeable gains in productivity. Non-farm employment increased again in the first two quarters and although it fell in August it rose again in September, when the unemployment rate fell again to a very low 3.9 per cent.

The strong dollar has had adverse effects on corporate profitability and exports. Corporate profits growth slowed down in the first two quarters of 2000, but the average masks a decline in the profits of financial corporations. Banks have become increasingly cautious about the economic prospects of firms and, in the face of high levels of corporate debt, have tightened their terms and standards of lending. Also, widening yield spreads (over treasury bills) in the corporate bond market point to increasing caution on the part of investors.

The current account deficit rose to $425 billion (annual rate) in the second quarter of 2000, corresponding to 4.3 per cent of GDP. This compares with an average of 3.7 per cent of GDP in 1999. Virtually all of the deterioration in 2000 was due to the increase of $87 billion (annual rate) in the merchandise trade deficit, of which about half was due to the rise in oil prices.

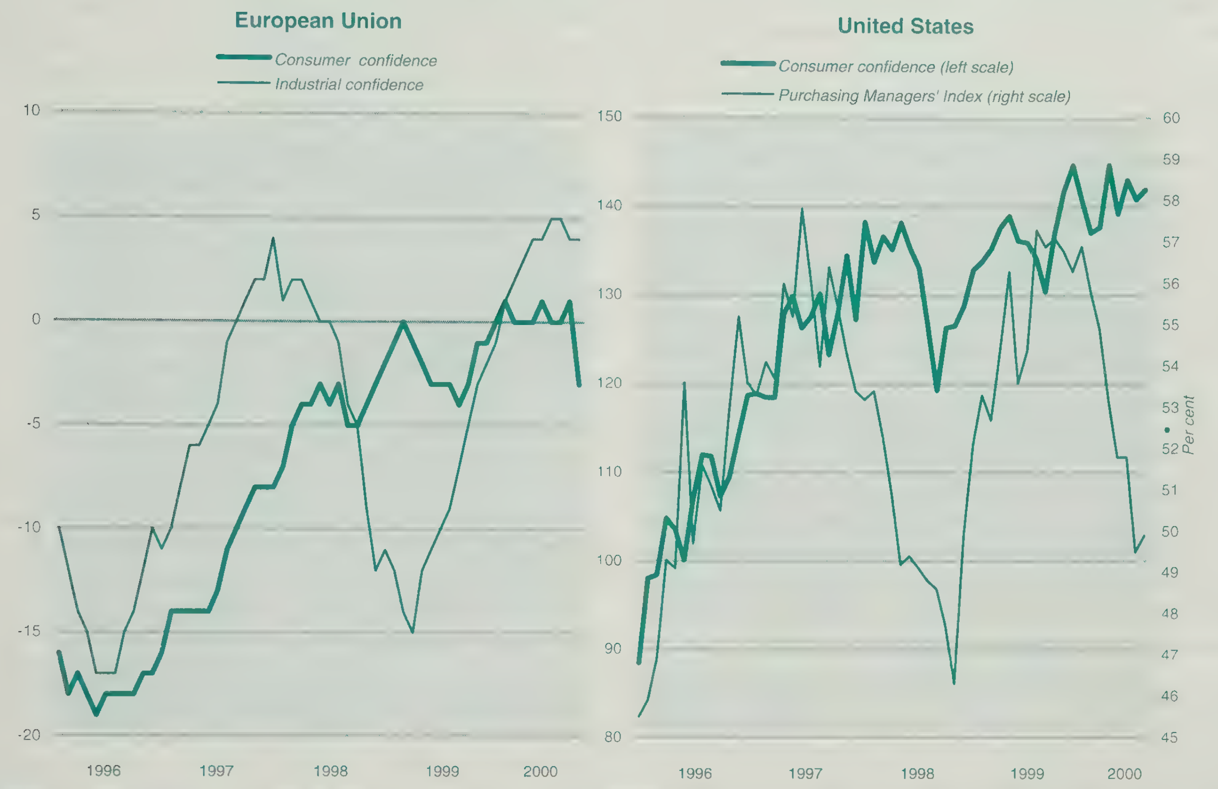
The persistent buoyancy of economic activity has led to tax revenues outpacing government expenditures by a large margin. The federal budget has been in surplus since 1998 and it rose by $100 billion to $237 billion, or 2¼ per cent of GDP, in fiscal year 2000 (which ended on September 30).

Given the continued strength of economic growth, the Federal Open Market Committee (FOMC) decided to further raise the target for the federal funds rate by half a percentage point to 6.5 per cent in May 2000, the total increase since June 1999 thus amounting to 1.75 percentage points. But since May, interest rates have been left unchanged reflecting the FOMC's conviction that the economy is heading for a "soft landing". Short-term interest rates in the money market responded to this earlier tightening of monetary policy but tended to fall slightly in the third quarter (see chart 1.1.6 below).

Real short-term rates, however, were still relatively low in the course of 2000. In the capital markets, yields on 10-year treasury bills have tended to decline despite upward pressures on inflation and very strong growth. This tendency reflects the impact of the United States Treasury's buy-back scheme for bonds and the

CHART 1.1.2

Business and consumer surveys in the European Union and the United States, January 1996-September 2000



Source: Data for the European Union: European Commission, *European Economy*, Supplement B (Luxembourg) and direct communications. Data for the United States: The Conference Board, New York (www.conference-board.org) and National Association of Purchasing Management, Arizona (www.napm.org).

Note: European Union data show net balances between the percentages of respondents giving positive and negative answers to specific questions. For details see any edition of the source. United States: consumer confidence is measured in index form with base year 1995=100. The Purchasing Managers' Index (PMI) is a composite index pertaining to the business situation in manufacturing industry. An index value above (below) 50 per cent indicates that manufacturing industry is generally expanding (contracting). A PMI above (below) 44.5 per cent, over a period of time, indicates that overall economic activity, as measured by real GDP, is generally expanding (contracting).

anticipated fall in the supply of long-term bonds (notably 30-year treasury bills) as a result of the large fiscal surpluses which are projected.

(ii) Western Europe

(a) Output and demand

The west European business cycle maintained strong momentum in the first half of 2000. In the *euro area*,[5] real GDP slowed down marginally to a quarterly rate of 0.8 per cent in the second quarter, following steady growth at 0.9 per cent in the three preceding quarters (table 1.1.1). Real GDP in the first half of 2000 was 3.4 per cent higher than a year earlier. Exports of goods and services continued to be the main sources of growth. Exporters benefited not only from the improved global environment but also from the substantial gains in price competitiveness resulting from the depreciation of the euro. Domestic demand remained strong in the first half of 2000, but its rate of expansion was not accelerating. Nevertheless, consumer and industrial confidence were at high levels in the first half of the year (chart 1.1.2) against the backdrop of favourable economic prospects. Private consumption was supported by gains in aggregate real incomes associated with rising employment, but the growth of real disposable incomes was checked by the sharp rise in energy prices, which put upward pressure on consumer prices. Nevertheless, private consumption continued to expand at a robust rate in the second quarter.

Improved sales prospects, rising capacity utilization rates and relatively low real interest rates have stimulated business fixed investment in machinery and equipment, which continued to expand at a brisk pace. Expenditures on these capital goods rose in real terms by 7.5 per cent in the first half of 2000 compared with the same period of 1999. Construction investment also edged upward further but the overall rate of expansion was restrained by the marked decline of construction in Germany. In sum, total fixed capital formation slowed down between the first and second quarters, but in the first half of 2000 it was still 5¼ per cent higher than a year earlier.

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[5] Quarterly GDP statistics for the euro area do not include Ireland and Portugal.

The acceleration of total domestic demand in the final quarter of 1999 did not continue in the first two quarters of 2000: instead, its growth remained steady at about 0.8 per cent. The relatively strong growth of domestic demand led to a considerable rise in imports, which to a large degree offset the impact of rising exports on domestic output. Changes in real net exports contributed 0.2 of a percentage point to the increase of 0.9 per cent in real GDP in the first quarter of 2000, but in the second quarter real net exports were slightly holding back the overall rate of economic growth. This pattern in GDP growth and the main expenditure items was much the same for the broader aggregate of western Europe.[6]

The cyclical upswing in the euro area (and in western Europe as a whole) in 2000 was especially supported by stronger growth in Germany and Italy, which had lagged significantly behind the average cycle in 1999. But the European averages continue to mask the more dynamic growth rates of the smaller economies (notably Finland, Ireland and the Netherlands) which are at a more advanced stage in their business cycle.

In France, the upswing lost some momentum in the first half of 2000, real GDP rising at a quarterly rate of 0.7 per cent in each of the first two quarters, down from 1 per cent in the last two quarters of 1999. The rate of expansion of private consumption slowed markedly in the second quarter: there were only small gains in real disposable incomes and the fall in the savings ratio which had supported household demand in the first quarter did not continue. Business investment remained strong, but residential investment weakened, apparently in response to rising mortgage rates.

In Germany, stronger private consumption expenditures more than offset a decline in government expenditure and fixed investment in the second quarter. Construction investment fell for the third consecutive quarter following reduced government incentives for residential investment but also reflecting a persistent excess supply of industrial buildings. Business expenditure on machinery and equipment in the second quarter was slightly more than in the first quarter (when it rose by 7 per cent) and there was also an increase in inventory accumulation. Exports remained buoyant against the backdrop of strong international demand for investment goods, which was also reflected in a marked rise in manufacturing output.

In Italy, the pattern of quarterly rates of growth was strongly influenced by the uneven changes in real imports of goods and services which stagnated in the first quarter but rose by 5 per cent in the second quarter of 2000. In the event, real GDP rose by only 0.3 per cent in the second quarter, down from 1.1 per cent in the first quarter of 2000. Exports continued to expand at a robust rate, but changes in real net exports subtracted nearly 1 percentage from the overall growth of total domestic demand in the second quarter, a marked swing from a positive contribution in the previous quarter. Fixed investment remained high, helped in part by government measures to support economically backward regions.

In the other economies of the euro area, the cyclical upturn remained strong but it slowed down from the buoyant rates of expansion in the final two quarters of 1999.

Outside the euro area, the rate of economic expansion in the United Kingdom remained strong in the first three quarters of 2000. The recovery in industrial production, especially in energy-related sectors, underway since mid-1999 was sustained but manufacturing output remained relatively sluggish. Private service industries continued to expand strongly. Real GDP rose by 3.4 per cent in the first three quarters compared with the same period of 1999. Data for the main expenditure items for the second quarter show that the growth in final domestic demand edged upwards because of a rebound in fixed investment and government consumption, and private consumption, supported by a falling savings ratio, remained buoyant throughout the first half of 2000. But there are indications, such as the apparent cooling of the housing market, that the underlying momentum of consumption growth may be easing. Exports have been boosted, notwithstanding the strong exchange rate, by the recovery of the world economy, but as a result of rising imports, changes in real net exports were a drag on the overall level of economic activity in the second quarter of 2000.

(b) Inflation

Price developments in western Europe in 2000 were strongly influenced by the large increase in crude oil prices. These fed through via higher prices of petroleum products (notably gasoline and heating oil) to the final consumer. Moreover, the continuing decline of the euro has placed further upward pressure on import prices, notably of international commodity prices (which are traded in dollars) for buyers in the euro area. The same holds for countries, such as Denmark, which have pegged their currencies to the euro. The weakness of the euro and the rise in energy prices also account for much of the pronounced increases in aggregate import and producer prices (chart 1.1.3).

But apart from energy prices, there has so far been relatively little pass-through from higher import and producer prices to consumer prices. Labour cost pressures have also remained moderate. In the euro area, core inflation (which excludes prices of energy and food products as well as alcohol and tobacco) was only 1.4 per cent in September 2000, up by 0.1 of a percentage point from August. In contrast, prices of energy products in September were 16 per cent higher than a year earlier.

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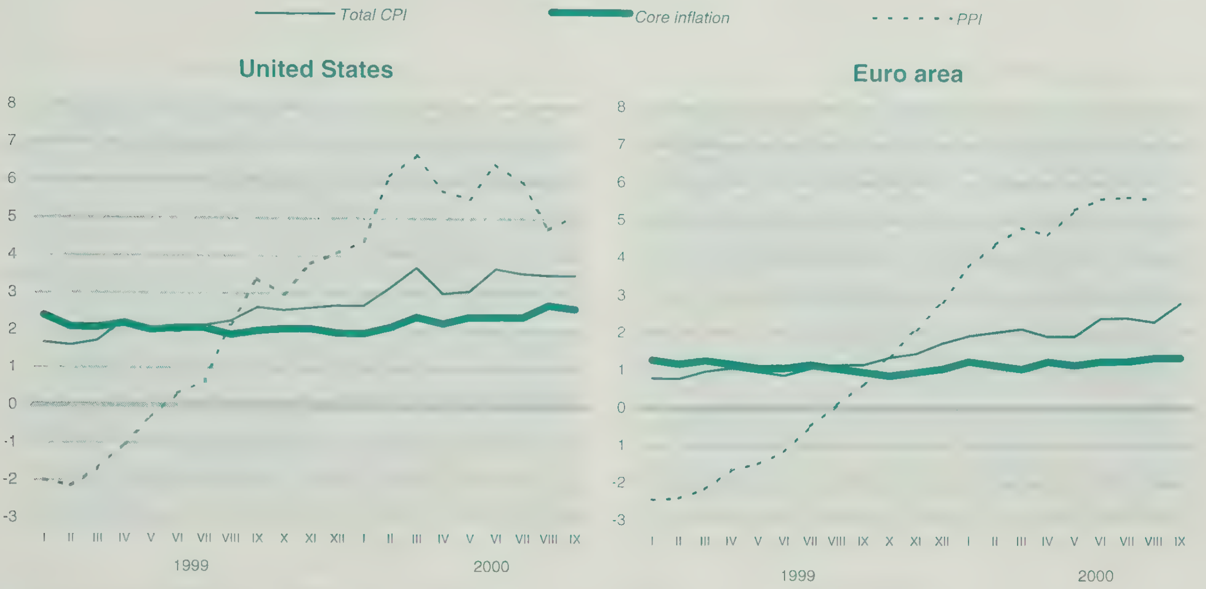
[6] Euro area plus Denmark, Sweden, Switzerland and the United Kingdom.

CHART 1.1.3

Consumer and producer price indices for the United States and euro area, January 1999-September 2000
(Percentage change over same month of previous year)



Source: Eurostat and United States Bureau of Labor.

Note: Harmonized index of consumer prices (HICP) for the euro area. The last available data for producer price indices (PPI) in the euro area was August 2000. Producer price indices: for the euro area, industry excluding construction; for the United States, all commodities.

This was the main factor which drove the "headline" inflation rate up to 2.8 per cent in September, half a percentage point more than in August and the highest monthly rate since May 1994. The average inflation rate for the first nine months of 2000 was 2.2 per cent and it can therefore be assumed that the average rate for 2000 will slightly exceed the 2 per cent ceiling of the European Central Bank's (ECB's) inflation target. This compares with an annual inflation rate of 1.1 per cent in 1999. More generally, the low rate of core inflation reflects the combined impact of intense competition at the retail level and continued moderation in the growth of unit labour costs. The combination of liberalization processes and the enforcement of competition rules have also brought consumers lower prices. In telecommunications, for example, residential telephone tariffs for international calls, fell, on average, by 40 per cent between 1997 and 1999 in most EU member states.

The average inflation rate in the euro area masks quite a large variation among the individual member countries. In September 2000, inflation ranged from 2.2 per cent in Austria to 5.5 per cent in Ireland. In Ireland, the effects of the oil price shock and the depreciating euro on domestic prices were amplified by the persistent buoyancy of domestic demand and an increase in tobacco taxes.[7] Core inflation in Ireland was 3.9 per cent in September and given the buoyant demand for labour, wage growth is forecast to outpace inflation by a considerable margin in 2000. This points to the risks of overheating and the emergence of a wage-price spiral. It also suggests that current monetary conditions in the euro area are not appropriate for the Irish economy. Similarly, the economic boom in Spain helped to raise core inflation to 3 per cent in August and September 2000. Core inflation also rose in Portugal, to 3.5 per cent, which is not much different from the headline inflation rate of 3.6 per cent.[8] Despite buoyant economic growth, core inflation has remained low in the Netherlands (1.3 per cent).

Outside the euro area, in the United Kingdom, the main domestic measure of inflation (RPIX) was 2.2 per cent in September 2000, which is below the government's target of 2.5 per cent. Headline inflation rose above 3 per cent, the difference between these two measures reflecting the higher mortgage rates due to the tightening of monetary policy.

(c) Labour markets

The cyclical upswing has led to a further improvement of the situation in the labour markets of

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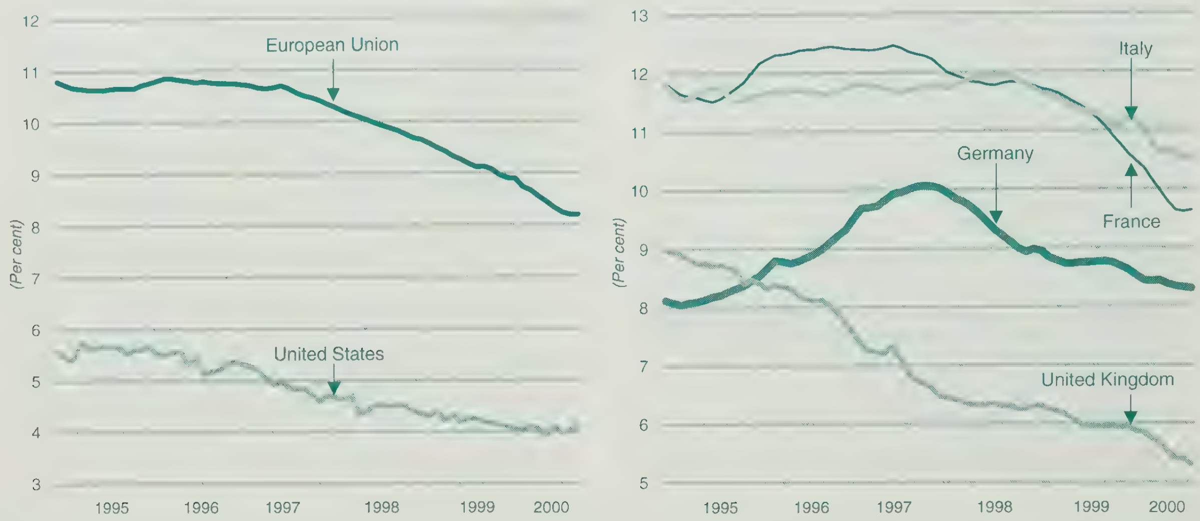
[7] There was an increase in tobacco excise duties, which is estimated to have added almost 1 percentage point to the overall change in the consumer price index in 2000.

[8] This small difference can be explained by the fact that the government maintains price ceilings on energy products (i.e. gasoline and automotive diesel) and in recent years has used excise taxes to offset pre-tax price variations of these products. Banco de Portugal, *Economic Bulletin*, March 2000.

CHART 1.1.4

Unemployment rates in western Europe and the United States, January 1995-August 2000
(Per cent of civilian labour force, monthly data, standardized rate)



Source: National statistics; OECD, *Main Economic Indicators*, various issues; Eurostat New Cronos Database.

western Europe with employment rising and unemployment falling. Employment is forecast to increase by 1.6 per cent this year, the same increase as in 1999. This would mean a cumulative increase in employment by about 6½ per cent between 1995 and 2000. This compares with an equivalent increase of 8 per cent in the United States, where the cyclical upswing appears to have passed its peak this year.

There was some reporting of labour shortages in a number of countries. Such shortages appear to have arisen especially in the information technology sector, where there has been an enormous boom in recent years. But there are also reports of shortages in traditional industries such as construction and textiles in some countries. In France, a shortage of skilled labour in the presence of high unemployment has probably been accentuated by the gradual introduction of the 35-hour work week.[9] One way of coping with such shortages in the short run is to create a more conducive environment for the immigration of skilled foreign labour, such an inflow being tantamount to an increase in output, especially if qualified workers are complementary to capital and less qualified workers.

Against the backdrop of favourable trends in output and employment, the rate of unemployment has fallen in all countries in 2000. The average in the euro area was 9 per cent in August, down from 9.9 per cent in the same month one year earlier. The EU unemployment rate fell by 0.8 of a percentage point to 8.3 per cent over the same period. This is still more than twice as high as the current record low unemployment rate of 3.9 per cent in the United States (chart 1.1.4).

The average numbers mask, however, a much better labour market performance in a number of smaller economies, sustained by robust economic growth and labour market reforms. In the Netherlands, strong demand for labour drove down the unemployment rate to just 2.5 per cent in the summer. Labour markets are now very tight, forcing firms to put more emphasis on labour-saving investment. The long economic boom in Ireland has resulted in the unemployment rate falling to 4.4 per cent in the summer. In Sweden, the rate fell below 6 per cent in August 2000, down from 7.1 per cent 12 months earlier. In Switzerland, where unemployment has been traditionally low, the short upswing has reduced the rate to only 1.7 per cent in September.

Despite these favourable tendencies, some 45 per cent of the unemployed (or 3.8 per cent of the labour force) in the EU had been without a job for more than one year in the second quarter of 2000. This compares with a peak of 50 per cent (or 5.2 per cent of the labour force) in the final quarter of 1997.

Apart from the strengthening of economic growth, the improvements in the labour market in the various countries also partly reflect a more conducive environment for work and hiring created by specific policy measures. These include an increasing number of part-time jobs, fixed term contracts and better supply-side conditions created by tax reforms. Reductions in the lower income tax rates can provide stronger work incentives for low-income (and often less qualified) earners, while reductions in the top marginal rates can weaken the incentives for the better qualified (and often more innovative) persons to seek activity in countries with lower marginal rates such as the United Kingdom and the United States.[10] Reductions in the top corporate tax rates are not only expected to create stronger incentives for fixed investment by domestic firms but also to attract more foreign direct investment and, as a result, lead to the creation of more jobs.

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[9] UN/ECE, *Economic Survey of Europe, 2000 No. 1*, p. 20.

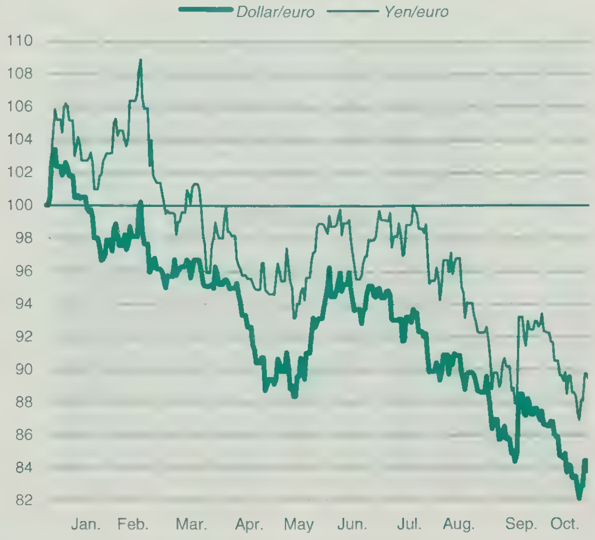
(d) Monetary conditions

Against the background of a strong cyclical recovery in the euro area, the ECB has progressively reversed its accommodative monetary policy in the course of 2000, the main refinancing rate being raised in six steps from 3 per cent to 4.75 per cent between February and early October.[11] The overall stance is now probably broadly neutral. The main motive for the Bank's action was to check the potential effects of rising energy prices on inflationary expectations via possible second-round effects on wages and prices. But the tightening of monetary policy after the summer was also seen to be intended to arrest and reverse the marked weakening of the euro in the foreign exchange markets. In late September, there was joint intervention by the G-7 central banks when the euro fell to $0.87 (chart 1.1.5). But this failed to reverse the underlying market tendency which appears to be influenced by the relatively faster rate of economic growth in the United States and by continued significant net outflows of direct and portfolio investment from the euro area. Selling pressure was accentuated in the course of October and towards the end of the month the euro was being traded for less than 83 cents, the lowest it has ever reached. The news about the unexpectedly strong slowdown of economic growth in the United States in the third quarter of 2000 has recently helped the euro. The real effective exchange rate of the euro in September 2000 was 10.5 per cent below its level 12 months earlier.

CHART 1.1.5

Exchange rates of the euro against the dollar and yen, January 2000-October 2000

(Indices, January 2000=100)



Source: European Central Bank.

Note: Daily values.

The tightening of monetary policy has been reflected in higher interest rates in the money and capital markets and in the lending rates of banks to enterprises and households. Nominal short-term interest rates in the euro area were somewhat more than 5 per cent in the autumn, up by about 2 percentage points from the beginning of the year (chart 1.1.6). Real short-term interest rates, however, were only about 2 per cent in September. Nominal long-term interest rates (yields on 10-year government bonds) have remained broadly unchanged in the course of the year so far, a reflection not only of stable inflationary expectations but also of developments in the United States bond markets (see above). Average *ex-post* real long-term rates were relatively low at about 3 per cent in the autumn.

In the United Kingdom, the Bank of England has held the base lending rate unchanged at 6 per cent since February. Following a pronounced appreciation against the euro in the course of 1999 and in early 2000, sterling weakened markedly in the second quarter, but picked up somewhat in the third quarter. In contrast, sterling depreciated substantially and steadily against the dollar up to the third quarter.

(iii) The short-term outlook

Current forecasts are for a continuation of the cyclical recovery in western Europe, with real GDP expected to increase by about 3 per cent in 2001, down from 3.4 per cent this year (table 1.1.2). The growth forecasts are the same for the euro area. The relatively

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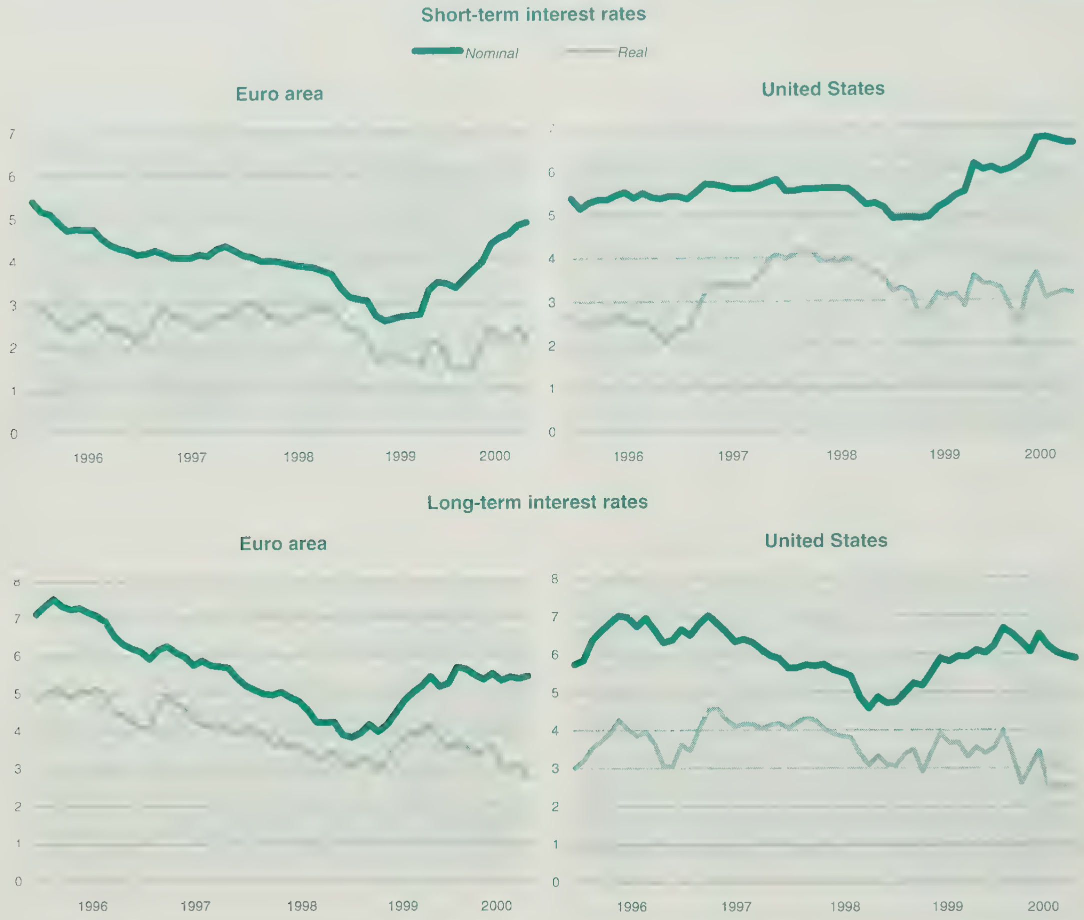
[10] In a recent report by the French Senate it was noted that although the number of French persons living abroad is relatively small compared with other advanced economies, the outflow of qualified persons to the Anglo-Saxon countries has accelerated in the 1990s. These decisions to migrate reflect a host of factors, including better job and business opportunities and higher net wages on account of lower income tax rates. Senate de la République Française, *Rapport d'information sur l'expatriation des jeunes Français*, 7 June 2000 (www.senat.fr/rap/r99-388/r99-3880.html).

[11] Since the end of June 2000, the ECB has conducted its main refinancing operations as variable instead of fixed rate tenders. In a fixed rate tender, the central bank decides both the total amount of liquidity to be provided and the cost of refinancing (the repo rate). In the normal case, the aggregate bids for funds will exceed the liquidity to be allotted. This leads to a pro-rata allocation of funds depending on the ratio of total liquidity to be supplied to total bids. But the ECB was faced with a persistent problem of massive overbidding which made it impossible to effectively gauge the underlying liquidity needs of banks. In the variable rate tenders, the ECB determines a minimum bid rate and banks indicate the interest rates they are willing to pay for various amounts of liquidity. The ECB, in turn, decides about the actual total supply of liquidity for a given demand curve. The new system implies that the actual refinancing rate is, in principle, determined in the bidding process. Fixed rate tenders have the advantage that the central bank can provide an unambiguous signal about the level of short-term interest rates to the money markets. In a variable interest rate tender, market forces have a greater bearing on refinancing rates, the mirror image of which is the loss of interest rate leadership by the central bank. So far, however, the average refinancing rate resulting from these variable rate tenders has differed only slightly from the minimum bid rate.

CHART 1.1.6

Short- and long-term interest rates in the euro area and the United States, January 1996-September 2000
(Per cent per annum)



Source: European central bank and OECD.

Note: Average monthly rates. Short-term rates: three-month money markets rates. Long-term rates: yields on 10-year government bonds (treasury bills). Real interest rates: nominal rates less year-on-year inflation rate in the corresponding month. Inflation measure: total HICP for euro area; total CPI for the United States.

mild slowdown expected in 2001 reflects the lagged effects of the progressive tightening of monetary policy and the less supportive global economic environment, notably the weakening of economic growth in the United States, and the rise in oil prices. Some offset to these factors will be provided by tax cuts, notably in France, Germany and Italy. Both private consumption and fixed investment should remain relatively strong, and exports are expected to continue to be an important source of growth in 2001. Current forecasts assume that the gains in price competitiveness associated with the weakness of the euro will be only partly reversed in 2001.

In the United States, the annual growth rate of GDP is expected to slow down from somewhat more than 5 per cent in 2000 to some 3¼ per cent. This is in line with the "soft landing scenario" in which growth of actual output in the United States will fall below the growth of potential output in the continued presence of moderate inflation. Such a development should allow for an orderly unwinding of the existing domestic and external imbalances. The slowdown in economic growth also partly reflects the impact of the progressive tightening of monetary policy. Also the wealth effect, which has supported private consumption in recent years should weaken, given the fall in asset prices. This should at the same time lead to some increase in the personal savings rate.

The short-term economic outlook for the western market economies and the global economy, however, remain subject to a number of important downside risks, which have not diminished in recent months.[12] These risks originate largely in the considerable imbalances which have built up in the United States economy and which, in turn, are reflected in the strong dollar. As a result, the possibility of a hard landing – involving sharp falls in share prices and the dollar – cannot be discarded. Such an outcome would, of course, lead to adverse spillovers in the rest of the world economy.

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[12] These are discussed in more detail in UN/ECE, *Economic Survey of Europe, 2000, No. 1.*

TABLE 1.1.2

Real GDP in ECE market economies, 1999-2001
(Percentage change over previous year)

	1999	*2000*[a]	*2001*[a]
Western Europe	2.0	3.4	3.1
4 major countries	2.0	3.0	2.9
France	2.9	3.3	3.3
Germany	1.6	3.0	2.7
Italy	1.4	2.9	2.8
United Kingdom	2.1	3.0	2.7
17 smaller countries	2.2	4.0	3.6
Austria	2.1	3.5	3.2
Belgium	2.7	3.8	3.0
Cyprus	4.5	..	..
Denmark	1.7	2.3	2.3
Finland	4.0	5.0	4.5
Greece	3.2	3.9	3.9
Iceland	4.4	4.0	2.1
Ireland	9.8	9.6	6.9
Israel	2.3	4.0	4.0
Luxembourg	4.9	5.1	5.0
Malta	4.2	..	..
Netherlands	3.9	4.6	4.0
Norway	0.9	2.7	1.5
Portugal	3.0	3.4	3.3
Spain	4.0	4.0	3.5
Sweden	3.8	4.2	3.3
Switzerland	1.5	3.0	2.2
Turkey	-5.0	4.5	4.8
North America	4.3	5.2	3.2
Canada	4.5	4.7	3.0
United States	4.2	5.2	3.2
Total above	3.1	4.3	3.1
Japan	0.2	2.0	2.0
Total above, *including Japan*	2.7	3.9	3.0
Memorandum items:			
European Union	2.4	3.4	3.1
Euro area	2.4	3.4	3.1

Source: OECD national accounts; national statistics and national economic reports.

Note: All aggregates exclude Israel. Growth rates of regional aggregates have been calculated as weighted averages of growth rates in individual countries. Weights were derived from 1996 GDP data converted from national currency units into dollars using 1996 purchasing power parities.

[a] Forecasts.

The unexpectedly large increase in international oil prices, moreover, has further increased the uncertainty surrounding the international economic outlook. Current forecasts assume that the current high level of oil prices will not be sustained in 2001 and that they will fall back to the OPEC target range of $22-$28 per barrel. Sustained high oil prices, however, would lead to a stronger than expected dampening of economic growth and increase the risk that wage earners will demand higher wages to offset the losses in their real incomes. This could trigger a wage-price spiral and a much more restrictive monetary policy than currently anticipated, with subsequent negative effects on levels of economic activity. But there are as yet no signs of such second-round effects in the labour markets. In fact, given that the oil price will fall back as from spring 2001 and that the euro will appreciate somewhat against the dollar, assumptions of virtually all current forecasts, inflation in the euro area should ease towards the ECB's 2 per cent ceiling in 2001. Therefore there does not appear at present to be any need for a further tightening of monetary policy, which, in fact, would pose an unnecessary risk to economic growth. Indeed, the rise in oil prices is not inflationary per se; it constitutes, rather, a one-off increase in the domestic price level, which should be accommodated by monetary policy.

1.2 Transition economies

(i) Introduction

An unexpectedly strong recovery in almost all the ECE transition economies marked the first half of 2000, their aggregate GDP increasing by 6 per cent above the same period of the previous year (table 1.2.1). In all of them (with the exception of Georgia) GDP increased, the first time in 10 years when such a robust economic performance has pervaded the region. Both external and domestic factors underpinned this growth. Strong import demand from western Europe gave a boost to exports from the transition economies while commodity exporters benefited from higher global demand and rising commodity prices. At the same time, progress in systemic transformation (although varying widely among countries) also contributed to the strength of the recovery, notably in the more advanced transition countries.

In many cases, however, the high growth rates merely indicate a recovery from a very low base. Given the enormous output decline in a number of transition economies during the past decade, the current recovery has still had little impact on the living standards of the population. Nevertheless, the economic upturn is most welcome, not least because it raises popular support for, and public confidence in, the market-oriented economic reforms in the transition economies.

Significantly, after a particularly difficult decade of economic and political transformation and a devastating crisis in 1998, one of the highest rates of growth in the region in the first half of 2000 was in Russia where GDP grew 7.5 per cent (year-on-year). Given the size of Russia's economy, this has a considerable influence on the aggregate rate of growth of the ECE transition economies as a whole. The factors behind the strong recovery in Russia are discussed in section 1.2(ii), but it is worth highlighting that, finally, there appear to be signs that economic restructuring has brought about some positive changes in market-oriented behaviour among Russian firms. Somewhat paradoxically, this is happening not so much because of the success of economic policies (the reform process has been one of stop-and-go, and polices have often been flawed) but in spite of a lack of coherent reforms during the past decade.

TABLE 1.2.1

Basic economic indicators for the ECE transition economies, 1998-2001

(Rates of change and shares, per cent)

	GDP (growth rates)						*Industrial output (growth rates)*			*Inflation (per cent change, Dec./Dec.)*			*Unemployment rate (end of period, per cent)*		
			2000												
	1998	*1999*	*April official forecast*	*Jan.-Jun. actual*	*October official forecast*	*2001 official forecast*	*1998*	*1999*	*Jan.-Jun. 2000*	*1998*	*1999*	*2000*[a]	*1998*	*1999*	*Jun. 2000*
Eastern Europe	1.8	1.4	4	4.6	4.2	4.3	1.4	-0.6	9.9	..	..	..	12.6	14.6	14.6*
Albania	8	7.3	8	..	7	8	21.8	16.0	18.4	7.8	-1.0	0.1	17.6	18.2	17.1
Bosnia and Herzegovina[b]	..	..	12	..	12	..	23.8	10.6	15.3	2.2	-0.4	0.5	38.5	39.1	..
Bulgaria	3.5	2.4	4	5.2	4.5	5	-7.9	-12.3	3.2	0.9	6.2	11.0	12.2	16.0	18.2
Croatia	2.5	-0.3	2.6	3.8	2.8	3-4	3.7	-1.4	2.8	5.6	4.6	7.3	18.6	20.8	20.5
Czech Republic	-2.2	-0.2	1.5	3.1	2.7	3	1.6	-3.1	5.0	6.7	2.5	4.2	7.5	9.4	8.7
Hungary	4.9	4.5	5	6.2	6	6	12.5	10.7	21.0	10.4	11.3	9.2	9.1	9.6	8.9
Poland	4.8	4.1	5.2	5.6	5	5.3	3.5	4.3	10.2	8.5	9.9	10.6	10.4	13.0	13.5
Romania	-5.4	-3.2	1.3	2.1	1.5	..	-13.8	-11.2	5.0	40.7	54.9	41.0	10.3	11.5	10.8
Slovakia	4.1	1.9	2	1.7	1.6	3.2	3.8	-3.4	8.3	5.5	14.2	15.4	15.6	19.2	19.1
Slovenia	3.8	5.0	3.75	4.9	4.75	4.5	3.7	-0.5	8.4	6.6	8.1	9.9	14.6	13.0	11.8
The former Yugoslav Republic of Macedonia	2.9	2.7	6	10.4	6	5-6	4.5	-2.6	10.7	-1.1	2.3	..	41.4	47*	..
Yugoslavia[c]	2.5	-19.3	14	..	14	..	3.6	-23.1	19.9	45.7	54.0	65.0	27.2	27.4	26.5
Baltic states	4.7	-2.3	3	3.9	3.6	4.2	6.0	-7.4	3.5	..	..	..	7.3	9.1	9.3
Estonia	4.7	-1.1	3.8-4.0	6.4	5.5	5.5	4.1	-3.9	12.0	6.8	3.9	3.0	5.1	6.7	6.2
Latvia	3.9	0.1	3.5	5.2	4-5	4.4	3.1	-5.4	3.8	2.8	3.3	2.6	9.2	9.1	8.4
Lithuania	5.1	-4.2	2	1.9	2.1	3.5	8.2	-9.9	-0.8	2.4	0.3	1.3	6.9	10.0	11.1
CIS	-3.0	2.9	2.3	7.0	5.8	4.1	-3.1	7.2	10.0	..	..	..	9.0	8.3	7.2
Armenia	7.3	3.3	5.6	2.6	4	6.5	-2.1	5.2	2.9	-1.2	2.1	-2.0	8.9	11.5	11.9
Azerbaijan	10.0	7.4	8	8.5	8	8.5	2.2	3.6	4.7	-7.6	-0.5	1.7	1.4	1.2	1.1
Belarus	8.4	3.4	2-3	4.0	2-3	3-4	12.4	10.3	5.6	181.6	251.3	190.7	2.3	2.0	2.0
Georgia	2.9	2.9	4.2-4.8	-1.8	3	4-5	-1.8	7.4	9.1	10.7	11.1	2.5	4.2	5.6	..
Kazakhstan	-1.9	1.7	3	10.5	5-6	5-6	-2.4	2.7	16.3	1.9	18.1	10.5	3.7	3.9	4.2
Kyrgyzstan	2.1	3.6	4-5	7.4	4-5	5.8	5.3	-1.7	3.3	18.3	39.8	13.0	3.1	3.0	3.2
Republic of Moldova[d]	-6.5	-4.4	2	1.7	–	5	-15.0	-9.0	3.6	18.2	43.8	31.7	1.9	2.1	2.2
Russian Federation	-4.9	3.2	1.5-2.5	7.5	6-7	4	-5.2	8.1	10.3	84.5	36.6	20.2	13.3	12.2	10.1
Tajikistan	5.3	3.7	..	6.5	..	..	8.2	5.6	9.0	2.7	30.1	35.0	2.9	3.1	3.1
Turkmenistan	5.0	16.0	12	14.0	12	12	0.2	15.0	14.0	19.8	..	..	..	..	..
Ukraine	-1.9	-0.4	1	5.0	3.5	3-4	-1.0	4.0	10.8	20.0	19.2	30.3	4.3	4.3	4.3
Uzbekistan	4.4	4.4	5	3.8	5	..	3.6	6.1	6.2	25.9	26.0	..	0.4	0.5	0.7
Total above	-1.1	2.2	3	6.0	5.2	4.2	-0.9	3.4	9.9	..	..	..	..	..	..
Memorandum items:															
CETE-5	3.2	3.1	4.1	4.8	4.4	4.7	4.5	2.8	10.8	..	..	..	10.2	12.5	12.5
SETE-7	-1.5	-3.0	3.6	4.2	3.8	3.3	-7.3	-11.5	6.9	..	..	..	15.4	16.5	16.5*
Former GDR	2.0	..	..	..	..	..	7.6	4.8	..	1.1	0.2	..	17.4	17.7	16.5

Source: National statistics; CIS Statistical Committee; direct communications from national statistical offices to UN/ECE secretariat.

Note: Aggregates are UN/ECE secretariat calculations, using PPPs obtained from the 1996 European Comparison Programme. Output measures are in real terms (constant prices). Forecasts are those of national conjunctural institutes or government forecasts associated with the central budget formulation. Industrial output refers to gross output, not the contribution of industry to GDP. Inflation refers to changes in the consumer price index. Unemployment generally refers to registered unemployment at the end of the period (with the exceptions of the Russian Federation, where it is the Goskomstat estimate according to the ILO definition, and Estonia where it refers to job seekers). Aggregates shown are: *Eastern Europe* (the 12 countries below that line), with sub-aggregates *CETE-5* (central European transition economies: Czech Republic, Hungary, Poland, Slovakia, Slovenia) and *SETE-7* (south-east European transition economies: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Romania, The former Yugoslav Republic of Macedonia and Yugoslavia); *Baltic states* (Estonia, Latvia, Lithuania); and *CIS* (12 member countries of the Commonwealth of Independent States).

[a] June 2000 over June 1999.

[b] Data reported by the Statistical Office of the Federation; these exclude the area of Republika Srpska.

[c] Gross material product instead of GDP. Data for 1999 and 2000 exclude Kosovo and Metohia.

[d] Excluding Transdniestria.

Whatever the particular effects of policy, one of the undisputed outcomes has been the abolition of administrative control and central planning in Russia and the privatization of a large share of the economy. Notwithstanding the remaining difficulties and restrictions, which are numerous, the dismantling of the command economy has created a degree of economic freedom sufficient for entrepreneurship to begin to develop in recent years on a relatively wide scale. While the amplitude of the present recovery would not have been possible without the existence of underutilized capacities, its broad base suggests that a large number of local manufacturers were capable of taking advantage of the favourable external and domestic economic conditions. The fact that at least some Russian firms are becoming responsive to market signals is an indication of the emergence of market-oriented behaviour and performance at the enterprise level.

The strong economic performance of most of the transition economies during the first half of 2000 was often accompanied by increased inflationary pressures. Despite sharply rising productivity and a predominantly export-driven recovery, rates of consumer price inflation in many countries were higher than expected, mostly due to the cost-push pressures generated by soaring fuel prices. In some cases, the unexpected resurgence of inflation spurred policy changes (principally a tightening of monetary policy), aimed at arresting further hikes. Another negative impact of rising energy prices is the risk to export competitiveness due to the still relatively high-energy intensity of output in the transition economies. So far this adverse effect has been more than offset by productivity gains but it could be a problem if productivity growth slows down. Fiscal developments, however, have been better than expected in most transition economies, not only due to the strength of the recovery but also because of windfall gains related to price sensitive revenue items (such as higher duties and excise taxes).

The effects of the strong recovery on labour markets have varied among countries, reflecting their different cyclical positions as well as differences in the extent of economic transformation. In most countries, however, the economic upturn has not led to a noticeable increase in labour demand, suggesting the existence of slack in factor utilization as well as a further deepening of the process of economic restructuring. Unemployment rates in many cases have increased or remained at precariously high levels.

The first half of 2000 was also marked by a surge of merchandise trade flows from and to the transition economies (table 1.2.2), although in a number of them the level of trade has still not regained its level before the Russian crisis. At the same time, the terms of trade effects of the rise in world commodity prices and the appreciation of the dollar were highly differentiated between the transition economies depending on the composition of their trade. Substantial gains in the relatively small group of commodity exporting CIS countries contrasted with sizeable losses for the net commodity importers (all the east European and Baltic states as well as a number of the CIS countries). Consequently, there were similarly large differences in the development of trade in volume and in value terms, with commodity exporters netting considerable windfall gains, while for some of the east European economies the volume of their exports grew by some 7-10 percentage points more than their current dollar value.

Despite the variable impact of international prices and exchange rates, in general there was some easing of pressure on the external balances during the first half of 2000. In many countries current account deficits narrowed (although for some the opposite was the case) and, in addition, the conditions of access to international capital markets generally continued to improve. Nevertheless, a number of transition economies continue to face external financial constraints on their rates of economic transformation and their prospects for growth.

The autumn of 2000 saw a change of political regime in Yugoslavia, which will undoubtedly have major implications not only for the Yugoslav economy but also for the south-east European region as a whole. Among the first signs of positive change were the partial lifting of sanctions (which should give a boost to all trade flows from and to south-east Europe) and the pledge by the EU and the IFIs of substantial assistance for the reconstruction of the Yugoslav economy. It is clear that the new Yugoslav administration is facing the daunting task of rebuilding and reviving a ruined economy – shattered not only by the air strikes of 1999 but also by the disastrous policies followed by the Milosevic regime – while at the same time launching a programme of market reforms that had been stalled for a decade. Given the severity of Yugoslavia's economic problems, their solution requires not only a major and coherent policy effort by the new government but also very substantial and generous assistance on the part of the international community.

(ii) Output and demand

A prominent feature of the economic performance of the ECE transition economies in the first half of 2000 has been the exceptionally rapid growth of the CIS countries and especially of the Russian Federation: their aggregate GDP rose by 7 per cent year-on-year, with a 7.5 per cent rate of growth in Russia. In eastern Europe aggregate GDP grew by 4.6 per cent and in the Baltic states by almost 4 per cent (table 1.2.1).

An export-driven upturn in manufacturing and mining is leading the recovery in practically all the transition economies, highlighting the importance of these sectors in the process of economic transformation. At the same time, the dependence of some transition economies, particularly in the CIS, on commodity exports is a major source of vulnerability to external shocks. In the present circumstances, exporters and governments are reaping windfall gains from the global demand and soaring world market prices; however, some prudence in the use of these funds is probably advisable against an eventual reversal of these developments.[13]

While external demand has been generally buoyant for all the transition economies, the strength of domestic demand has varied considerably. In the small group of the leading transition economies both private consumption and investment have made sizeable contributions to

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[13] For example, by setting aside some of the unanticipated fiscal revenue as a cushion against future external shocks.

TABLE 1.2.2

International trade and external balances of the ECE transition economies, 1998-2000

(Rates of change and shares, per cent)

	Merchandise exports in dollars (growth rates)			Merchandise imports in dollars (growth rates)			Trade balances (per cent of GDP)			Current account (per cent of GDP)		
	1998	1999	2000[a]	1998	1999	2000[a]	1998	1999	2000[a]	1998	1999	2000[a]
Eastern Europe [b]	9.3	-0.8	14.2	9.0	-2.2	12.0	-10.0	-9.6	-9.4	-4.6	-5.5	-5.4
Albania	50.9	28.3	-11.3	28.2	11.3	14.3	-19.2	-16.9	-18.7	-1.5	-4.2	-9.2
Bosnia and Herzegovina	82.7	47.3	41.1	36.4	14.7	8.7	-42.8	-43.5	-22.8	-26.6	-49.9	-53.1
Bulgaria	-15.1	-5.6	23.8	0.5	9.9	19.8	-6.2	-12.0	-15.5	-0.5	-5.5	-8.1
Croatia	8.9	-6.0	10.9	-7.9	-7.2	–	-17.7	-17.4	-15.9	-7.0	-7.5	-7.7
Czech Republic	15.7	1.9	12.9	4.4	0.3	16.7	-4.4	-3.8	-4.7	-2.4	-1.9	-3.0
Hungary	20.4	8.7	14.1	21.1	9.0	14.1	-5.7	-6.2	-7.5	-4.9	-4.3	-3.6
Poland	2.6	-3.1	11.9	10.9	-2.5	9.7	-11.9	-11.9	-11.6	-4.3	-7.4	-7.4
Romania	-1.5	2.4	27.4	4.9	-12.2	19.8	-8.5	-5.5	-6.3	-7.2	-3.8	-2.9
Slovakia	11.8	-4.9	20.8	11.9	-13.5	10.4	-10.5	-5.1	-2.4	-9.7	-5.5	-1.6
Slovenia	8.1	-5.6	4.3	7.8	-1.4	-2.5	-5.4	-7.0	-7.7	-0.8	-3.9	-2.7
The former Yugoslav Republic of Macedonia	11.0	-9.0	29.0	9.0	-6.1	56.0	-17.2	-17.6	-24.5	-8.8	-3.9	-9.3*
Yugoslavia	6.8	-47.6	12.8	0.1	-31.8	33.8	-11.8	-10.9	-8.7	-7.0	-7.4	-6.5*
Baltic states	3.5	-12.6	22.3	7.5	-13.9	15.0	-22.7	-19.0	-17.2	-11.0	-9.7	-4.9
Estonia	10.3	-9.2	27.5	7.8	-14.0	25.8	-29.7	-22.9	-24.7	-9.2	-5.7	-5.5
Latvia	8.3	-4.9	11.2	17.1	-7.6	10.9	-22.6	-19.5	-16.8	-10.7	-10.3	-5.6
Lithuania	-3.9	-19.3	23.7	2.6	-17.3	8.6	-19.4	-16.9	-13.9	-12.1	-11.2	-4.2
CIS	-15.2	-1.1	48.6	-14.0	-23.8	15.5	6.0	15.2	23.3	-1.7	8.7	16.3
Armenia	-5.2	5.4	16.8	1.1	-11.2	13.5	-36.0	-30.9	-43.3	-21.3	-16.6	-30.2
Azerbaijan	-22.4	53.3	186.0	35.6	-3.9	31.7	-10.6	-2.7	9.1	-30.7	-15.0	-2.4
Belarus	-3.2	-16.2	24.3	-1.6	-22.1	34.1	-12.9	-7.0	-15.9	-7.6	-2.4	-3.3
Georgia	-19.7	23.7	64.0	-6.3	-31.9	2.4	-19.8	-13.3	-10.3	-11.9	-7.1	-3.6
Kazakhstan	-16.3	2.9	105.6	1.1	-15.3	28.9	4.9	12.0	27.0	-5.5	-1.1	6.7
Kyrgyzstan	-15.0	-11.6	4.3	18.7	-28.7	-5.7	-20.5	-12.0	-4.4	-23.2	-15.2	-6.7
Republic of Moldova	-27.8	-26.9	13.3	-12.6	-44.0	40.0	-23.1	-9.6	-25.2	-19.0	-2.0	-10.5
Russian Federation	-16.3	0.5	53.7	-17.9	-29.5	6.8	10.3	22.7	31.1	0.4	13.7	22.2
Tajikistan	-20.0	15.4	31.0	-5.2	-6.7	3.1	-8.7	2.4	17.3	-8.1	4.4	17.7
Turkmenistan	-20.9	99.9	68.6	-14.9	46.7	34.9	-14.6	-8.9	11.0	-33.0	-21.4	2.4
Ukraine	-11.2	-8.4	18.0	-14.3	-19.3	22.3	-5.0	-0.9	-3.1	-3.2	2.8	1.5
Uzbekistan	-20.1	-9.0	-1.9	-25.4	-9.1	12.9	0.6	0.5	-2.0	-0.8	-0.1	-3.4
Total above [b]	-3.5	-1.4	29.3	0.4	-9.7	13.1	-2.7	-0.1	4.6	-3.3	0.2	4.0
Memorandum items:												
CETE-5	11.6	0.6	13.0	11.1	-0.6	11.3	-9.0	-8.7	-8.9	-4.2	-5.6	-5.3
SETE-7 [b]	0.2	-7.1	21.1	2.2	-8.1	15.3	-12.7	-12.5	-11.5	-6.0	-5.1	-5.8

Source: National statistics; CIS Statistical Committee; direct communications from national statistical offices to UN/ECE secretariat; IMF; UN/ECE secretariat calculations.

Note: Foreign trade growth is measured in current dollar values. Trade and current account balances are related to GDP at current prices, converted from national currencies at current dollar exchange rates. Current-price GDP values for the first half of 2000 are in some cases estimated from reported real growth rates and consumer price indices. On regional aggregates, see the note to table 1.2.1.

[a] January-June.

[b] Aggregates of current account balances exclude Bosnia and Herzegovina and Yugoslavia.

growth. At the same time domestic demand has remained subdued in a number of countries due to policies or to lags in the transmission of output and productivity gains into real income.

(a) Eastern Europe and the Baltic states

Among the *central European countries*, economic growth in the first half of 2000 exceeded expectations in the Czech Republic, Hungary and Slovenia. Hungary was the fastest growing economy in the region with year-on-year GDP growth rate of 6.2 per cent. Growth accelerated during the second quarter in the Czech Republic and Slovakia mostly due to industrial output. By June GDP growth in the Czech Republic was more than double the expected annual rate and in Slovakia industrial confidence and output increased significantly although growth during the first half-year was below expectations. In the Czech Republic and Hungary the official forecasts of GDP growth for the current year were revised upwards (table 1.2.1), but there was some concern in Hungary that the high growth rate may not be sustained because of lower then expected investment. Although much stronger than in 1999, the Polish economy showed some signs of slowing down in the second quarter of 2000: after growing at 6.2 per cent and 6.0 per cent (year-on-year) during the two preceding quarters respectively, GDP growth decelerated to 5.2 per cent. This pulled down the average for the first half of 2000 to 5.6 per cent and, with a further slowdown expected in the second half of the year, prompted a slight lowering of the forecast for the year as a whole.

Given the strong cyclical upturn in western Europe, economic growth in the central European transition economies has been driven mainly by exports of manufactures. After a year of decline, industrial output in the Czech Republic, Slovakia and Slovenia grew more than GDP growth in the first half of 2000. The rate of growth of industrial production in Hungary almost tripled, from 7.7 per cent to 21 per cent (table 1.2.3). Electrical machinery and optical equipment underpinned these high growth rates with sales increasing by over 63 per cent during the first eight months of 2000 compared with the same period in 1999.[14] In Poland industrial production during the first half of the year rose 10.2 per cent driven by rapid export growth (up 24.7 per cent in volume);[15] preliminary data for July-September, however, point to some deceleration (table 1.2.3). In most of these countries output growth was relatively higher in electrical and optical equipment, but wood products, rubber and plastics, chemicals, and transport equipment also tended to grow more than average. In contrast, the growth of the service sector has tended to be below average,[16] although within the industrial sector, growth rates have been uneven.[17] The construction sector on average has been less buoyant than in previous years: in Poland it has been stagnating since April 2000 (largely due to a slackening in the rate of fixed investment) and in Slovakia it has been in decline for a third consecutive year.

With stronger import demand from western Europe in 2000, export growth has outpaced domestic demand in the central European economies. Thus, in Hungary exports of manufactured goods increased in the first eight months by more than 31 per cent (year-on-year), or about 7.5 percentage points more than the growth of industrial output. Nevertheless, at the same time, domestic sales of manufactured goods in Hungary increased by 12.6 per cent.[18] In Slovenia, the export-led rebound marked a break with the pattern of previous years when domestic demand played a leading role.

Buoyant external demand and growing investment have in general led to a fall in the share of private consumption in GDP in the first half of 2000; government consumption is also expected to be in line with or below the growth of consumer demand. During the first half of 2000, consumer demand in Hungary increased by only 3.4 per cent whereas gross fixed capital formation rose by 6.1 per cent. In Slovenia consumer demand is expected to increase by 2.9 per cent and gross fixed capital formation by 9 per cent for 2000 as a whole.[19] A similar pattern of final demand is also to be seen in the Czech Republic and Slovakia.

In Poland, domestic demand, which has been rising more slowly than GDP since the fourth quarter of 1999, has been gradually weakening in the course of 2000: the year-on-year rates of growth of private consumption and gross fixed capital formation declined from 4.6 per cent and 5.5 per cent in the first quarter to 2.6 per cent and 2.9 per cent, respectively, in the second.[20] Recent changes in the volume of retail trade point to a further, substantial slowdown of private consumption in July-August (table 1.2.4). The tightening of monetary policy in Poland (in particular the increases in interest rates in late 1999 and early 2000) have had a negative impact on both fixed capital investment and personal consumption expenditures, the latter also being affected by the decline in real personal incomes.

During the first half of 2000, output strengthened considerably in the three *Baltic states*: their aggregate GDP increased by 3.9 per cent (year-on-year), following a fall of 2.3 per cent in 1999. However, the pace of recovery from last year's recession has been uneven in the three countries: this is especially the case in the dynamics of domestic demand, particularly of investment.

In Estonia GDP rose 6.4 per cent year-on-year in January-June 2000, the highest rate among the Baltic states, based on surging industrial output (up 12 per cent in the first half of the year), which in turn was due to rapid export growth. The service sector, in the first place transportation, also made a significant contribution to growth.[21] The construction sector was also growing,

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[14] Electrical machinery and optical equipment (NACE/ISIC 30-33). During the same period gross output of radio, television and communication equipment (ISIC 32) increased by more than 128 per cent. The growth in demand for this category of manufactured goods was almost evenly divided between the external and internal markets, export sales increasing by 65.7 per cent and domestic sales by 63.5 per cent. A relatively insignificant industry in Hungary 10 years ago, it now accounts for almost 22 per cent of export demand and 8.4 per cent of domestic demand for industrial goods (food and tobacco continue to make up about 25 per cent of domestic demand for industrial goods). Hungarian Central Statistical Office (CSO), Stadat system (www.hsu.hu).

[15] The aggregate volume growth of exports of manufactured goods is a weighted average of the changes for SITC Sections 5 to 9. UN/ECE secretariat calculations based on data in CSO, *External Trade* (Warsaw), January-June 2000, p. 196.

[16] For example, in Hungary it increased by 2.5 per cent, much less than GDP growth.

[17] Thus in Poland, the rise in industrial output in the first half of 2000 was mainly sustained by the manufacturing sector (up 10.7 per cent in the first half of 2000) while mining and quarrying output remained almost flat. CSO, *Statistical Bulletin*, Vol. XLIV, No. 7, August 2000 (Warsaw), p. 30.

[18] Hungarian CSO, Stadat system (www.hsu.hu).

[19] Institute of Macroeconomic Analysis and Development, *Slovenian Economic Mirror*, Vol. VI, No. 7 (Ljubljana), July 2000.

[20] Polish quarterly national accounts statistics; direct communication from the Polish CSO to the UN/ECE secretariat.

[21] Rail freight and goods processed through Estonian ports increased by 25 to 30 per cent in this period.

TABLE 1.2.3

GDP and industrial output in the ECE transition economies, 1999-2000

(Percentage change over the same period of the preceding year)

	GDP							*Industrial output*						
	1999				*2000*			*1999*				*2000*		
	Jan.-Mar.	*Jan.-Jun.*	*Jan.-Sept.*	*Jan.-Dec.*	*Jan.-Mar.*	*Jan.-Jun.*	*Jan.-Sept.*	*Jan.-Mar.*	*Jan.-Jun.*	*Jan.-Sept.*	*Jan.-Dec.*	*Jan.-Mar.*	*Jan.-Jun.*	*Jan.-Sept.*
Eastern Europe	-0.1	0.4	1.1	1.4	4.8	4.6	..	-4.4	-3.7	-2.3	-0.6	8.5	9.9	10.2[a]
Albania	..	..	..	7.3	..	..	..	26.6	19.4	23.0	16.0	16.8	18.4	18
Bosnia and Herzegovina	..	..	..	..	..	..	..	11.7	9.6	9.3	10.6	17.8	15.3	10.1
Bulgaria	0.8	1.8	3.0	2.4	4.8	5.2	..	-16.2	-13.4	-14.1	-12.3	5.2	3.2	2.0[a]
Croatia	-1.5	-1.1	-1.0	-0.3	4.0	3.8	..	-3.6	-1.9	-2.8	-1.4	3.7	2.8	2.7
Czech Republic	-3.3	-1.6	-0.7	-0.2	4.4	3.1	..	-9.1	-6.6	-5.2	-3.1	4.8	5.0	5.8[a]
Hungary	3.5	3.7	4.0	4.5	6.6	6.2	..	8.2	7.7	8.7	10.7	20.8	21.0	20.9[a]
Poland	1.6	2.4	3.3	4.1	6.0	5.6	..	-2.6	-0.7	1.5	4.3	10.1	10.2	9.2
Romania	-4.5	..	..	-3.2	0.9	2.1	..	-9.6	-9.3	-9.0	-11.2	0.5	5.0	7.5[a]
Slovakia	1.8	2.4	1.8	1.9	1.5	1.7	..	-8.0	-6.6	-5.0	-3.4	4.3	8.3	9.1[a]
Slovenia	2.9	5.2	4.9	5.0	6.3	4.9	..	-2.9	-2.3	-1.7	-0.5	7.2	8.4	7.7
The former Yugoslav Republic of Macedonia	..	..	..	2.7	..	10.4	..	-13.3	-9.7	-2.6	-2.6	10.3	10.7	6.4[a]
Yugoslavia	..	..	..	-19.3	..	..	..	-10.4	-28.2	-26.0	-23.1	-5.0	19.9	18.8
Baltic states	-2.6	-2.2	-2.7	-2.3	4.8	3.9	..	-10.3	-9.7	-8.7	-7.4	6.1	3.5	4.0[a]
Estonia	-3.3	-2.9	-2.1	-1.1	5.2	6.4	..	-12.9	-10.5	-7.4	-3.9	11.6	12.0	11.8
Latvia	-1.5	-1.3	-0.8	0.1	5.5	5.2	..	-13.2	-14.3	-11.6	-5.4	3.6	3.8	3.2[a]
Lithuania	-2.9	-2.4	-4.1	-4.2	4.2	1.9	..	-8.0	-7.3	-8.1	-9.9	4.5	-0.8	1.4
CIS	-2.1	-0.5	1.7	2.9	7.6	7.0	..	-1.2	2.7	5.9	7.2	11.0	10.0	9.9
Armenia	4.6	4.9	6.1	3.3	0.3	2.6	..	-4.4	2.8	7.6	5.2	0.3	2.9	3.9
Azerbaijan	6.2	5.6	6.9	7.4	6.5	8.5	9.9	4.1	2.0	2.8	3.6	3.5	4.7	5.8
Belarus	1.4	2.4	2.4	3.4	6.4	4.0	5.0	3.7	7.0	7.6	10.3	7.5	5.6	8.1
Georgia	3.6	2.6	3.7	2.9	0.6	-1.8	..	-5.7	0.6	1.7	7.4	14.1	9.1	7.2
Kazakhstan	-3.6	-3.3	0.3	1.7	9.2	10.5	..	-4.1	-4.1	–	2.7	15.2	16.3	15.4
Kyrgyzstan	1.2	0.4	3.5	3.6	1.0	7.4	5.7	-4.6	-10.0	-4.6	-1.7	-4.8	3.3	6.7
Republic of Moldova	-7.8	-5.3	-1.7	-4.4	1.0	1.7	..	-27.1	-25.2	-12.8	-9.0	3.3	3.6	2.0
Russian Federation	-2.7	-0.7	1.8	3.2	8.4	7.5	..	-1.6	3.1	7.0	8.1	11.9	10.3	9.7
Tajikistan	2.4	2.4	0.9	3.7	3.8	6.5	10.8	4.4	7.9	6.8	5.6	8.7	9.0	10.1
Turkmenistan	13.3	14.6	14.0	16.0	12.0	14.0	17.0	15.0	18.0	18.0	15.0	14.0	14.0	21.0
Ukraine	-4.7	-3.0	-1.7	-0.4	5.5	5.0	5.0	-2.4	0.2	2.3	4.0	9.7	10.8	11.6
Uzbekistan	2.9	3.8	4.4	4.4	3.0	3.8	4.2	4.7	5.6	5.9	6.1	5.1	6.2	6.4
Total above	-1.4	-0.2	1.4	2.2	6.5	6.0	..	-2.8	-0.5	1.9	3.4	9.8	9.9	10.1[a]
Memorandum items:														
CETE-5	1.0	1.9	2.5	3.1	5.4	4.8	..	-2.8	-1.2	0.4	2.8	10.3	10.8	10.7[a]
SETE-7	-2.8	-3.2	-2.4	-3.0	3.3	4.2	..	-9.8	-11.8	-11.3	-11.5	1.6	6.9	7.9[a]
Former GDR	..	..	..	..	..	..	..	4.6	4.8	5.2	4.8	..	..	..

Source: National statistics; CIS Statistical Committee; direct communications from national statistical offices to UN/ECE secretariat.

Note: Industrial output figures are based on monthly statistical reporting. Because of differences in coverage, monthly cumulative figures for 1999 as a whole differ slightly from reported annual figures for some countries. For these countries reported annual figures have been used. On regional aggregates see the note to table 1.2.1.

[a] January-August.

albeit not as rapidly. Domestic demand in general was growing more slowly than output (by 3.7 per cent in the first quarter of 2000), but the almost 10 per cent increase in the volume of retail sales suggests an acceleration in private spending during the course of the year (table 1.2.4). Private sector fixed investment has grown faster than GDP since the beginning of the year, but it has not yet fully regained its pre-crisis level.

Latvia's GDP increased 5.2 per cent in the first half of the year. There were signs of some slowing down in the second quarter, and the recovery of gross industrial output (3.8 per cent year-on-year in January-June) was somewhat below expectations.[22] Value added in the construction sector increased by 4.4 per cent, a marked deceleration from the rate in 1999 due mainly to lower public investments. The service sector also contributed to the growth of aggregate output with a 5.1 per cent year-on-year rate of growth. Domestic demand, supported by low interest rates and a more rapid growth of monetary aggregates, was recovering strongly with

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[22] However, manufacturing value added in January-June 2000 increased by 5.5 per cent over the same period of the previous year.

TABLE 1.2.4

Retail trade in selected transition economies, 1999-2000
(Percentage change over same period of preceding year)

	1999				2000		
	Jan.-Mar.	*Jan.-Jun.*	*Jan.-Sept.*	*Jan.-Dec.*	*Jan.-Mar.*	*Jan.-Jun.*	*Jan.-Sept.*
Albania	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	..	..	..	24.9	36.1	..
Bulgaria	-4.6	-1.8	-1.4	-6.0	6.7	3.7	3.5[a]
Croatia	-7.1	-7.9	-7.6	-4.6	6.5	11.6	12.9[b]
Czech Republic	1.0	1.6	1.2	2.2	6.6	5.9	5.2[b]
Hungary	2.9	3.9	4.6	6.5	4.2	2.9	3.4[a]
Poland	10.8	13.2	15.3	16.9	10.6	8.1	5.8[a]
Romania	4.6	0.8	-2.6	-5.0	-12.3	-8.8	-8.1[b]
Slovakia	8.8	12.1	10.9	9.8	-1.7	-1.4	-0.3[a]
Slovenia	-5.9	5.5	2.9	2.9	17.7	5.7	6.8[b]
The former Yugoslav Republic of Macedonia	13.3	12.0	15.7	15.5	4.2	8.8	10.4
Yugoslavia	-6.5	-19.5	-20.4	-18.9	-13.6	3.8	5.3[b]
Estonia	3.2	3.3	3.9	5.5	9.0	11.4	11.8
Latvia	25.2	17.1	12.9	12.0	5.6	4.6	5.3[b]
Lithuania	-15.5	-13.4	-13.2	-11.5	8.5	9.7	10.0[a]
Armenia	12.7	14.9	13.6	7.7	7.4	6.3	6.9
Azerbaijan	14.8	13.9	13.7	13.3	9.3	10.0	10.1
Belarus	-3.9	-0.3	1.6	9.7	18.8	10.7	6.1
Georgia	-8.4	4.5	4.5	4.6	9.7	13.2	11.4
Kazakhstan	7.2	3.7	-1.1	3.7	..	0.3	..
Kyrgyzstan	4.8	3.1	1.0	0.9	2.5	6.2	5.5
Republic of Moldova [c]	-33.1	-33.0	-32.7	-27.8	-3.0	5.1	6.4
Russian Federation	-13.7	-12.8	-12.3	-7.7	7.3	7.6	8.3
Tajikistan	49.4	37.8	21.1	4.0	-28.8	-27.0	-22.1
Turkmenistan	23.0	28.0	38.0	37.0	38.0	31.0	33.0
Ukraine	-8.5	-7.2	-6.8	-4.1	9.2	6.5	6.2
Uzbekistan	12.9	11.8	11.0	10.5	5.1	5.3	5.0

Source: National statistics; CIS Statistical Committee; direct communications from national statistical offices to UN/ECE secretariat.

Note: Retail trade covers mainly goods in eastern Europe, the Baltic states and the Russian Federation, goods and catering in other CIS countries. The coverage in the monthly statistics is based on current reporting and may differ from the coverage in the annual statistics.

a January-August.

b January-July.

c Registered enterprises.

gross fixed capital formation rising by some 6 per cent in the first quarter of 2000.

In Lithuania, the recovery has been less robust: after a promising start in the first quarter (GDP was up 4.2 per cent), growth slowed considerably in the second, resulting in an average increase in GDP of 1.9 per cent for the first six months of 2000. A fall in total industrial output in the first half of the year was largely the result of the decline in oil refining, one of Lithuania's major industries.[23] It was only because of trade and especially transport services (the latter backed by vigorous transit cargo)[24] that output remained relatively strong in the first half of the year. With investment sharply down on the last quarter of 1999, construction was also weak. Domestic demand lagged behind GDP growth, leaving exports as the main force behind the economic recovery. Both consumption and investment were depressed as a result of tight fiscal and monetary policies (in particular, rising interest rates), but the pick-up in retail trade in the second quarter may point to some recovery at least in private consumption.

The more favourable international environment has also been beneficial for the transition economies in *south-east Europe*: governments in the region are forecasting high rates of GDP growth in 2000 (tables 1.2.1 and 1.2.2), in some cases the highest of the past decade. However, it remains to be seen whether these economies will manage to build on these favourable trends or whether they will result in just a one-time cyclical recovery. In addition, the south-east European economies are rather heterogeneous: on the one hand, although all of them suffer from numerous economic weaknesses, the nature of their problems varies widely from country to country; on the other hand, the profile of the present recovery also differs across the region.

The relatively high rates of GDP growth in Albania in recent years (as well as a projected 7 per cent growth for 2000) are mostly due to the strong performance of the service sector and, to a lesser extent, of agriculture. Manufacturing industry has a very small share in the country's economy and despite the reported high rates of growth it remains a marginal contributor to the overall growth of output.[25] After a sluggish performance in 1998 and 1999, a strong recovery is underway in The former Yugoslav Republic of Macedonia as well, with GDP rising by a reported 10.4 per cent in the first half of 2000. This turnaround was predominantly export driven, with industrial output growing by 10.7 per cent; output in the service sector has also recovered strongly. During the first half of the year there was a partial recovery in the Yugoslav economy from the steep fall in activity caused by the Kosovo conflict. A substantial share of economic activity in 2000 was directly or indirectly linked to a major postwar reconstruction effort, but this, however, has put further pressure on the country's public finances, which were already under considerable strain.

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[23] Recently privatized Mazeikiu Nafta, Lithuania's only oil refinery, has suffered from crude oil supply cuts from Russia.

[24] The Lithuanian port of Klaipeda was the fastest growing port in the Baltics in the first half of 2000 with freight turnover increasing by 43 per cent, to 10.9 million metric tons. In Estonia, Tallinn's port turnover grew by 25 per cent and amounted to 15.7 million tons, whereas the largest Baltic seaport, Latvia's Ventspils, saw a 3 per cent decline, reporting a turnover of 18.1 million tons in January-June 2000. *The Baltic Times*, No. 38(225), 21-27 September 2000 (www.baltictimes.com).

[25] The available statistics on industrial production for Albania are of dubious quality. For example, the monthly, quarterly and annual indices of industrial production in constant prices, published by the Statistical Office of Albania (Institut de la Statistique), are not consistent and it is difficult to draw meaningful conclusions about the actual dynamics of industrial output. Thus, while the reported annual rate of growth for 1998 was 21.8 per cent, the monthly and quarterly fixed-base indices imply growth rates of 1.4 per cent and 15.3 per cent, respectively. At the moment of writing this *Survey*, no annual index for industrial output was available for 1999, but calculations based on the monthly fixed-base series suggest a decline (by 2.8 per cent), while the quarterly fixed-base series points to a significant increase (by 22.2 per cent). Caution is thus obviously needed in assessing the reported monthly and quarterly statistics for 2000 as well.

The year 2000 will probably mark the end of a three-year period of deep recession in Romania: during January-June, GDP increased by 2.1 per cent and for 2000 as a whole GDP is expected to rise. The export-led recovery of the manufacturing sector has been the principal source of this positive outcome (industrial output has been accelerating since March), although the negative impact of the poor harvest remains to be seen in the data for the second half of the year. Domestic demand, which had been depressed during the past three years, also recovered somewhat in the second quarter of 2000.

Recovery has also been underway in Croatia, largely due to a strong performance of the tourist industry[26] and partly to an upturn in manufacturing exports. The dynamics of domestic demand in the first half of 2000 was uneven: while private consumption recovered faster than GDP (by 5.3 per cent), gross fixed capital formation was down 5.5 per cent from the same period of 1999. The latter reflected a series of austerity measures introduced by the newly elected government (in office since January) to check the unsustainable rise in public spending initiated by the previous administration.

There was a strong economic upturn in Bulgaria in the first half of the year, with GDP growing by 5.2 per cent. This was due to a rapid expansion of services and an export-led recovery in manufacturing industry. However the pace of industrial output was uneven, with only a handful of industries benefiting from the surge in external demand: despite a 23.8 per cent rise in exports in the first half of the year (table 1.2.2), total industrial output increased by just 3.2 per cent. Domestic demand in January-June was also buoyant and grew even faster than GDP (by 5.8 per cent compared with the first half of 1999) mostly driven by a surge in fixed investment (mainly publicly-financed infrastructural projects).

(b) Commonwealth of Independent States

The *European CIS countries* were the fastest growing subregion among the transition economies thanks to the strong economic upturn in Russia. According to preliminary Goskomstat figures, Russia's GDP increased by an unprecedented 7.5 per cent during the first six months of 2000, after growing by 7.0 per cent year-on-year in the second half of 1999. Such rates of economic growth have not been seen in Russia since the 1960s: they are quite unusual for large economies and they came as a surprise not only to most observers but also to the Russian authorities.

Several factors need to be taken into account when interpreting the current rate of Russian growth. The first is the low base of the recovery which in turn resulted from the deep economic collapse which followed the 1998 financial crisis. It was only in the first half of 2000 that aggregate output recovered from this fall. Secondly, the combination of rising oil prices and a rising dollar (export prices of Russian oil being quoted in dollars) have been highly favourable for the Russian economy. Thirdly, domestic suppliers have benefited substantially from the devaluation of the rouble in 1998 which has led to massive import substitution; although this effect has been weakening in 2000, the real exchange rate of the rouble still appears to be very competitive. Finally, there are signs that the Russian recovery is broadly based, not only across the various sectors of economic activity but also among economic agents, with smaller firms making a significant contribution to the strength of the recovery.

Output growth remained very strong in the third quarter of 2000, despite earlier expectations of a slowdown in the second half of the year: gross industrial production increased by 8.5 per cent after expanding by 8.8 per cent in the second and 11.9 per cent during the first quarter of the year.[27] In the first nine months recovery was underway in the overwhelming majority of industrial branches. The largest output gains were in the light industries, printing, pharmaceuticals and medical equipment, and ferrous metallurgy (with increases of some 20 per cent and more). A robust growth of more than 16 per cent has also been reported in chemical and machine-building industries.

Another support to recovery is the upturn in investment: during the period January-September real investment outlays were 17.5 per cent higher than in the same period of 1999.[28] Thanks to this the construction industry, which until recently had been in a deep depression, has started to recover.[29] With a relatively good grain harvest,[30] gross agricultural output has also been on the rise since mid-year which may give a further impetus to economic growth in the remaining months of 2000. Output in the energy sector was also rising albeit at more modest rates: in January-September, the output of electricity and fuel industries increased by 2.1 and 5.3 per cent, respectively.

For much of 1999, Russian growth was driven almost entirely by the increase in net exports while domestic demand was actually subtracting from aggregate output growth. Although lags in reporting the national accounts prevent a more comprehensive analysis of the ongoing changes in 2000, there are signs of an upturn in domestic demand as well.[31] As noted earlier, there has been a surprising upsurge in investment (at rates of growth not seen for more than a decade).[32] Having collapsed in 1998-1999 (a cumulative fall of more than 30 per cent), real disposable incomes of the population increased in the first half of 2000 by 8.2 per cent and in August were nearly 10 per cent higher than a year earlier. Real wages (which fell by 22 per cent in 1999) were 25.4 per cent higher in August than 12 months earlier.[33] The recovery in real incomes is mirrored in the dynamics of consumer's expenditure: the volume of retail sales, which started to recover in the final months of 1999, increased by 8.3 per cent in January-September and in September was some 10 per cent higher than a year earlier.[34]

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[26] During the first seven months of 2000, the number of tourist arrivals was 43.7 per cent higher than a year earlier and the number of overnight stays was up by 50.1 per cent. Croatian National Bank, *Monthly Bulletin*, No. 52 (Zagreb), September 2000, p. 11. This has more than offset the losses caused by the Kosovo conflict in 1999.

[27] UN/ECE secretariat calculations, based on Goskomstat statistics.

[28] Russian Federation Goskomstat, *Sotsial'no-ekonomicheskoe polozhenie Rossii* (Moscow), January-September 2000, p. 7.

[29] Construction output grew by 11.7 per cent year-on-year during the first nine months of 2000. Ibid, p. 50.

[30] The Russian authorities expect this year's grain harvest to exceed 70 million tons, compared with 55 million tons in 1999 and 48 million in 1998. Bank of Finland, *Russian & Baltic Economies, The Week in Review*, No. 39, 2000.

Recovery has also been underway in the rest of the European CIS countries in the first half of 2000. After a decade-long contraction, output increased in both Ukraine and, albeit at a modest rate, in the Republic of Moldova, while in Belarus, according to official statistics, the economy continued to expand for the fifth consecutive year. However, in all three economies, growth was narrowly based and the rate remained below the CIS average.

In Ukraine, the second largest CIS economy, real GDP rose by 5 per cent in the first half of 2000. The pace of the recovery was much stronger than expected thanks mainly to the rebound in some heavy industries (especially ferrous and non-ferrous metals) which was due to strong external demand, particularly from Russia and Asia, and the lagged effect of the real depreciation of the exchange rate in 1999. Import substitution also boosted output in industries such as food, textiles, pharmaceuticals and wood processing. On the other hand, energy production fell sharply, in part because of the chronic payments crisis in this sector. According to preliminary and proxy statistics, there has been a recovery in both private consumption and fixed capital investment.[35]

However, the economic recovery in Ukraine remains fragile as it is based on a distorted production structure. The economy contracted continuously during the past decade, and so substantial excess capacity allowed for a swift recovery in some traditional industries in 2000. Growth, however, will not be sustainable without new investments, the lack of which has been one of the major obstacles to economic restructuring and the efficient functioning of labour markets in Ukraine as well as in other transition economies. The fiscal situation also remains precarious, with low budget revenues, a large external debt, and widespread impoverishment combined with continuing political instability which discourages foreign investment.

In the Republic of Moldova, real GDP fell by nearly 70 per cent between 1989 and 1999, among the worst performances in all the ECE transition economies. In the first half of 2000, a modest recovery was getting underway with GDP increasing by 1.7 per cent thanks to export-led growth in a few industries.[36] Given that both the economy as a whole and the export sector are overly dependent on agriculture, the damage to crops caused by one of the worst droughts in decades is expected to have a negative impact on aggregate output in the second half of 2000. Given the very low and still falling level of real wages, as well as persistent liquidity shortages, domestic demand has remained rather depressed.

In recent years, the economy of Belarus has been shaped by expansionist industrial policies aimed at stimulating employment and local production. In the absence of coherent reforms the side effects of these policies, which were maintained in 2000, include a high rate of inflation (despite numerous price controls) and widespread shortages. During the first half of the year, the main boost to economic growth continued to come from manufacturing industry (thanks in turn to the strong import demand in Russia and other CIS countries for cheap manufactured goods), while agricultural output was falling. In addition, some manufacturing branches appear to have benefited from import substitution effects. According to the official data the volume of retail sales increased sharply in the first quarter but later growth slowed significantly, due to the combined effect of moderate industrial wage growth, high inflation and, probably, a decline in real household incomes in the agricultural sector. Nevertheless, aggregate domestic demand was supported by expansive monetary and fiscal policies and capital investment, mainly in housing, but these have deepened further Belarus' chronic macroeconomic imbalances.

The economies of the *Caucasian rim* have been growing since 1996; in the first half of 2000 the recovery continued in Azerbaijan and, more modestly, in Armenia, but in Georgia real GDP fell because of a record-low harvest. Azerbaijan was again the fastest growing economy in the region (with nine-month GDP up almost 10 per cent on the same period of 1999) thanks to the expansion in oil-related industries and services (such as transport and communications). Furthermore, a good grain harvest, increased cotton exports and a strong revival of some non-oil industries such as metallurgy and engineering also contributed to the outcome. Consumer demand was also strong,[37] underpinned by continued recovery in real wages and expanding employment, despite growing wage arrears in some sectors. After several years of rapid expansion, however, the slowdown in capital investment, which started in 1999, seems to have continued in 2000, mainly due to a moderation in FDI which has been affected by continuing uncertainty about the location and timing of several large oil-related construction projects.

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[31] The recovery of domestic demand has been slower partly due to the continuing outflow of capital from Russia (section 1.2(vi)).

[32] There is some evidence that a number of Russian manufacturing companies have started to make long-term business plans and, accordingly, to invest in new equipment as well. *Financial Times*, 5 October 2000.

[33] Russian Federation Goskomstat, op. cit, p. 7.

[34] However, the volume of sales in January-September 2000 was still considerably below their level in the same period of 1998, that is, immediately before the financial crisis.

[35] The volume of retail trade increased by 6.2 per cent during the first 9 months (table 1.2.4), while during January-July fixed investment grew by some 20 per cent. PlanEcon, *PlanEcon Report. Developments in the Economies of Central Europe and Russia*, Quarterly Report, Vol. XVI, No. 17 (Washington, D.C.), 6 October 2000, p. 38.

[36] The recovery was basically confined to the food and beverage sectors, which account for some two fifths of total industrial production.

In contrast to Azerbaijan, the *Armenian* economy has performed below expectations in 2000 mostly due to a fall in agricultural output caused by the severe drought. Real GDP and gross industrial output rose by 2.6 per cent and 2.9 per cent, respectively, in the first half of 2000, but these estimates do not reflect the full effect of the poor harvest on the food processing industries. Household demand was weak, as evidenced by the consumer price deflation during the first half of the year (table 1.2.5).[38] Given the economy's relatively low investment ratio, partly a result of its limited access to external financing, capital investment in Armenia has never been the engine of economic recovery that it has been in Azerbaijan.[39] Given the continued depressed state of demand and the low level of business confidence, fixed investment has probably remained weak in 2000.

In Georgia, where export-led growth resumed in autumn 1999, the authorities were expecting a strengthening of the economic recovery in 2000. Indeed, thanks to favourable external demand, there was rapid growth in both industrial output and exports during the first half of the year (tables 1.2.2 and 1.2.3). Agricultural production and food processing, however, which accounts for about one third of GDP, fell sharply due to a severe drought; as a result, according to preliminary estimates, GDP actually shrank by 1.8 per cent in the first half of the year.

In general, the level of economic activity was relatively high in the *central Asian CIS countries* during the first half of 2000. After reporting the worst performance in the region in the first half of 1999, the Kazakh economy embarked on a fast recovery which continued in 2000. Notwithstanding its low starting point, real GDP growth accelerated to 10.5 per cent in the first half of 2000 (up from 9.1 per cent in the first quarter). This robust growth was underpinned by an export-driven increase in the volume of industrial production.[40] In turn, fiscal performance was well above expectations and this allowed the government to eliminate the accumulated pension arrears, to repurchase all of its outstanding debt to the IMF and to continue to reduce other domestic payment arrears.[41] Fixed investment rose by almost a third in January-June stimulated by higher commodity prices and renewed foreign interest in the oil and metals sectors. However, this rapid pace of growth in Kazakhstan may not last as its considerable dependence on commodity exports makes its economy very vulnerable to commodity price swings.

Kyrgyzstan's GDP grew by 7.4 per cent in the first half of 2000. Agriculture continued to be the main source of growth: in the first half gross agricultural output grew by nearly 11 per cent. Industrial production was also up in January-September,[42] due to increased output in power generation as well as in the fuel and textile sectors. The construction sector's output rose sharply (by almost 70 per cent, year-on-year) due to investment in infrastructure, particularly in power stations, transmission lines and transport networks. While the general economic situation in Kyrgyzstan has improved, especially in the second quarter of 2000, the fiscal situation remains difficult.[43] In the first half of 2000, as a result of high debt levels and lower than expected revenues the country incurred external debt service arrears (in addition to existing pension arrears). Although the domestic and external arrears have now been paid and debt-restructuring agreements concluded with most creditors, the external debt problem remains to be addressed.

In Tajikistan, the poorest central Asian CIS country, GDP grew by 6.5 per cent in the first half of 2000. Domestic economic activity, which is still recovering from the civil war and persistent regional rivalries, was stimulated by increased aluminium production. The country has one of the world's largest aluminium smelters, but the plant requires large investment outlays to be able to reach full production. While recent production levels were well below the plant's capacity, aluminium production remains the key industrial activity and aluminium exports provide more than half of the country's export revenues. In the agricultural sector, a severe drought has affected grain and possibly cotton production; fears have been expressed that food shortages could lead to famine as the wheat harvest is about half of what it was in 1999.

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[37] Retail trade volume increased by 10 per cent in the first nine months of 2000 (table 1.2.4).

[38] Although the volume of retail trade increased by some 7 per cent in the first 9 months of 2000, this was nearly half of the rate of increase in the same period of 1999.

[39] In the period 1997-1999, gross fixed capital formation in Armenia on average amounted to one sixth of GDP whereas in Azerbaijan it was twice as high in relative terms. Over the period 1996-1999, the annual level of real gross fixed capital formation more than quadrupled in Azerbaijan while it increased by just 26 per cent in Armenia. UN/ECE secretariat estimates, based on national statistics.

[40] During the first six months of 2000 gross industrial output was up 16.3 per cent (table 1.2.3); output in the key oil and base metal sectors increased by an estimated 20 and 40 per cent, respectively. Agency of Statistics of the Republic of Kazakhstan, *Sotsial'no-ekonomicheskoe polozhenie Respubliki Kazakhstan* (Astana), July 2000.

[41] IMF, "Kazakhstan repays the IMF ahead of schedule", *News Brief* No. 00/35 (Washington, D.C.), 1 June 2000 and Interfax News Agency as quoted in *Reuters News Service,* 29 September 2000.

[42] Although it fell in the first quarter of the year (table 1.2.3).

[43] The budget deficit, which is primarily financed by borrowing from bilateral creditors and multilateral institutions, reached 12 per cent of GDP in 1999. IMF, "IMF concludes Article IV consultation with Kyrgyz Republic", *Public Information Notice,* No. 00/87 (Washington, D.C.), 13 October 2000.

According to the official statistics, Turkmenistan's GDP and industrial output both increased by 14 per cent in the first half of 2000. This expansion was led by a one-third increase in the output of the fuel sector (which represents 60 per cent of all industrial output), thanks to the resumption of gas sales to Russia.[44] Despite unfavourable weather, agricultural output was up 21 per cent over the same period of 1999, with the wheat harvest increasing by almost a third owing to a larger area sown and higher yields.

Economic activity was relatively high in Uzbekistan in the first half of the year: GDP increased by 3.8 per cent, thus continuing the trend of the past two years. According to the official statistics, growth was broadly based and was supported by strong domestic demand: industrial output increased by 6.2 per cent and agricultural output by 7 per cent, while the volume of retail sales grew by 5.3 per cent. The economy, which is in need of deep structural changes, continued to rely on gold and cotton exports to support the import substitution strategy. Rising external debt and low export prices, however, have forced the government to initiate modest changes in its economic policy. The government has adopted a new privatization programme and has opened the possibility of full currency convertibility following the official unification of central bank and commercial exchange rates.[45]

(iii) Costs and prices

Inflationary pressures in most of the transition economies intensified over the first three quarters of 2000, even though strong output growth was predominantly export driven and labour productivity improved considerably, rising faster than wages in many countries. Annualized rates of price inflation[46] were higher than expected in several countries.

The major cause of higher than expected inflation rates was the soaring world market dollar prices of crude oil and natural gas which, compounded by the strong appreciation of the dollar, led to frequent increases in domestic fuel and utility prices.[47] Consequently, this imported inflation, which started to accelerate significantly from mid-1999, either reversed or considerably reduced the rate of disinflation that has prevailed in recent years in most of the transition economies of eastern Europe and the Baltic region. This has been a major setback for the authorities in these countries who were hoping to reduce wage pressures through lower inflationary expectations. Furthermore, given both the social and inflationary impacts of increases in administered energy prices, some governments have sought to postpone or limit previously planned increases in order to prevent even higher rates of inflation. This in turn may fuel inflation in the medium term and/or prolong the completion of the process of price liberalization in the energy sector thus impeding the restructuring and privatization of this sector.

Among the *east European countries*, consumer prices continued to fall in the nine months to September in Albania and increased only very little in Bosnia and Herzegovina (table 1.2.5). As for the rest of the region, disinflation continued only in Romania and Slovakia but only because of weak consumer demand. In Romania, however, the annualized rate remained well above the government's initial target rate of 27 per cent:[48] in addition to a series of tariff and tax increases[49] and higher oil prices, a bad harvest led to a sharp rise in food prices.[50] Rising food prices have also been an important inflationary factor (together with higher import prices) in Bulgaria, Hungary and Poland, with all three economies likely to overshoot their annual inflation targets.[51] However, other factors affecting prices differed between the three countries. In Bulgaria and Poland, the sharp falls in employment combined with moderate real wage growth have kept consumer demand in check. In contrast, consumer demand in Hungary has remained strong thanks to a continuing expansion of credit and a large rise in private sector wages;[52] increases in relative

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[44] Output in the natural gas, oil extraction and refining sectors increased by 37, 7 and 3 per cent year-on-year, respectively.

[45] Nevertheless, the currency's black market rate still remains three times the official rate.

[46] Unless specifically qualified, "inflation" in this section refers to the increase in consumer prices.

[47] Most of the forecast or target rates of inflation incorporated in the 2000 budgets were made in mid-1999 when the crude oil prices were some 80 per cent lower than in the third quarter of 2000.

[48] The original target of 27 per cent was considered over-ambitious from the start. In fact, it was increased in the course of the year to a more plausible 40 per cent.

[49] For example, the unification and extension of VAT rates in January and April, respectively, large increases in natural gas and electricity charges in June contributed strongly to the overall increase in consumer prices.

[50] During the course of the first nine months of 2000, food prices in Romania increased by nearly 34 per cent compared with less than 23 per cent in the same period of 1999.

[51] In Bulgaria, the initial target of 2.8 per cent has been increased to 6 per cent (December, year-on-year). Even this new target is likely to be overshot considering that 6.1 per cent has already been achieved in the first nine months. In Poland the initial target (5.4-6.8 per cent) has also been increased to 6-8 per cent. However, this seems to be within reach given the overall slowdown in the third quarter in economic activity. In Hungary the government did not change its initial forecast of 6-7 per cent (annual average) which was based on two basic assumptions: the average crude oil price of $18 per barrel, and the average nominal wage growth of 8.25 per cent. Given the actual increase in both and the annualized rate of inflation reached in the first nine months, the inflation target is very likely to be overshot. In fact the central bank, noting that the core inflation rate (excluding food and energy) rose in line with the headline inflation rate in September, increased interest rates sharply.

[52] Private sector wages increased by 15.1 per cent in the second quarter of 2000. In the same period public sector wages rose by 9.2 per cent, bringing the average nominal wage increase to 13.3 per cent. National Bank of Hungary, *Quarterly Report on Inflation*, September 2000, p. 9.

TABLE 1.2.5

Consumer prices, industrial producer prices and labour costs in industry,[a] 1999-2000

(Percentage change)

	September over previous December		*August over previous December*		*Annual average percentage change*					
	CPI		*PPI*		*Nominal gross wages*[b]		*Real product wages*[c]		*Labour productivity*[d]	
	1999	*2000*	*1999*	*2000*	*1999*	*2000*[e]	*1999*	*2000*[e]	*1999*	*2000*[e]
Albania	-4.3	-2.4	..	..	..	..	..	..	18.5	..
Bosnia and Herzegovina	-2.2	1.3	-14.2	-11.0	15.4	10.3	10.7	9.8	10.4	14.3
Bulgaria	3.8	8.6	-1.0[f]	4.5[f]	5.5	10.9	2.3	..	-4.6	19.8
Croatia	3.3[g]	5.4[g]	2.7	5.2	5.7	5.1	3.2	-3.9	1.5	5.5
Czech Republic	1.8	3.4	2.0	3.3	6.6	7.2	5.5	2.5	0.3	9.6
Hungary	9.4	8.5	3.4	8.4	13.4	15.5	8.1	4.5	9.5	23.3
Poland	6.8	7.1	4.8	5.0	9.0	12.8	3.1	4.6	7.5	21.0
Romania	38.9	29.9	42.0	34.0	44.0	43.7	1.3	-6.5	-5.1	11.6
Slovakia	12.8	7.3	5.3	6.6	7.9	10.5	4.0	–	-0.5	13.4
Slovenia	6.2	7.1	-0.2	5.5	9.3	10.8	7.0	4.4	1.1	9.8
The former Yugoslav Republic of Macedonia	-0.7[f]	1.7[f]	-1.6[f]	2.7[f]	1.2	5.0[h]	1.3	-2.3[h]	-7.6	7.3[h]
Yugoslavia	31.3	52.9	10.3[i]	35.7[i]	23.1	45.8[h]	-14.1	-14.2[h]	-12.6	..
Estonia	2.5	3.1	0.4	3.5	10.6	10.9	12.0	6.5	2.0	13.0
Latvia	1.6	0.8	-1.4	0.4	14.3	9.0	19.1	8.0	-1.3	2.9
Lithuania	0.7	0.7	9.6	2.3	6.5	1.6	3.4	-18.1	-8.5	–
Armenia	0.4	-2.8	2.3	-1.0	20.1	14.4	15.3	14.1	7.5	5.8
Azerbaijan	-1.4	0.5	0.6	6.4	5.8	15.3	7.2	3.4	2.0	4.3
Belarus	136.9	78.5	137.2	106.7	326.4	252.0	-6.4	26.5	9.4	7.1
Georgia	6.7	2.2	..	..	..	..	..	..	..	..
Kazakhstan	13.4	5.7	30.4	8.5	14.8	29.5	-3.5	-15.8	2.6	3.4
Kyrgyzstan	32.4	5.8	34.2	6.1	23.4	19.5	-18.9	-10.2	4.1	0.4
Republic of Moldova	28.6	15.5	43.1	19.4	23.9	33.5	-15.8	-4.7	3.5	2.0
Russian Federation	31.4	14.1	41.1	23.0	42.6	46.5	-10.3	-6.0	8.8	9.1
Tajikistan	40.9	33.1	50.9	14.6	41.7	32.2	-2.7	-13.6	22.6	21.0
Turkmenistan	15.1	..	9.9	..	7.6	..	..	..	12.9	..
Ukraine	10.1	21.6	10.5	14.1	16.1	25.2	-11.5	3.3	13.9	12.6
Uzbekistan	10.2[f]	9.0[f]	16.3	52.9	62.4	56.7	17.7	4.9	5.2	5.5

Source: UN/ECE secretariat estimates, based on national statistics and direct communications from national statistical offices.

[a] Industry = mining + manufacturing + utilities.

[b] Average gross wages in industry except in Bosnia and Herzegovina and The former Yugoslav Republic of Macedonia – net wages in industry; in Bulgaria, Estonia and all CIS economies – gross wages in total economy; in Yugoslavia – net wages in total economy.

[c] Nominal gross wages deflated by producer price index.

[d] Gross industrial output deflated by industrial employment.

[e] January-June 2000 over January-June 1999.

[f] March over previous December.

[g] August over previous December.

[h] January-March 2000 over January-March 1999.

[i] May over previous December.

wages in the service sector (passed through in higher service prices) have also added to inflationary pressures.

In the Czech Republic, the moderate acceleration in consumer prices in the first three quarters of 2000 was mainly due to external shocks. Given the subdued consumer demand the central bank's target range of 3.5-5.5 per cent for the "net" inflation rate[53] in December (year-on-year) is likely to be achieved even if the economic recovery gains momentum. However, compared with most of its neighbours, productivity growth in Czech industry remained modest in the first half of the year, and the somewhat faster growth in producer prices relative to consumer prices in the third quarter suggests that cost pressures are gradually increasing.

In Slovenia, consumer prices accelerated in the course of the first three quarters of 2000. Although, as in the Czech Republic, labour productivity increased relatively modestly,[54] a restrictive incomes policy has dampened the growth in wage costs in 2000, and the unit labour costs remained virtually unchanged over the first half of the year. Therefore, the annual rate of inflation will probably remain within the central bank's target range of 8.8-9.9 per cent for the end of the year. In Croatia, personal expenditure recovered strongly in the first half of 2000, thanks to particularly strong revenues from tourism, which offset the contraction of real household incomes due to declining employment and falling real wages. Nevertheless, the acceleration in consumer prices was kept in check by the strong kuna and the government's decision to lower fuel taxes to cushion the rise in oil prices. However, the growing fiscal deficit and the faster than expected growth in producer prices suggest that inflation could accelerate further.

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[53] Net inflation excludes regulated prices and indirect taxes on unregulated prices.

[54] In Slovenia, employment growth accelerated in the first half of 2000 and, unlike the situation in the Czech Republic, output recovery was more or less evenly shared between increased employment and improved labour productivity.

Among the *Baltic economies*, inflation increased only in Estonia, a reflection of its stronger economic upturn and a significant strengthening of consumer demand. Nevertheless, the inflation rate in Estonia still remained lower than those prevailing in the majority of east European economies. In Latvia, even though personal consumption was recovering, the relatively strong exchange rate[55] offset some of the inflationary effects of rising oil prices. In Lithuania, the combined effect of a sluggish economic recovery, tight fiscal and monetary policies, and the fixed exchange rate (against the dollar), kept the inflation rate very low.

In contrast to most of the east European economies, the inflation rate fell sharply in most of the *CIS economies* as the effects of the Russian financial crisis began to recede.[56] Furthermore, increased exports and tax revenues have reduced the major imbalances in the majority of these economies. In most CIS countries, industrial producer prices have also decelerated although, on average, they still rose much faster than consumer prices. This discrepancy reflects both the extensive use of retail price controls (extreme cases are Belarus and Uzbekistan) and the continued existence of large amounts of overemployment in the unrestructured industries. While the former is likely to intensify the pressure on consumer prices in the near future (postponed inflation), the latter slows the growth of labour productivity and hence impedes any attempt to moderate unit labour costs without squeezing the growth in wages. Therefore, without an acceleration in the pace of microeconomic reforms, these improvements in macroeconomic stabilization in the CIS economies may prove to be short-lived.

(iv) Labour markets

Despite the strong recovery in the majority of transition economies, employment has continued to fall in many countries during the first half of 2000, and especially in eastern Europe (table 1.2.6). In addition, unemployment rates generally remained high throughout the first eight months of 2000. Unemployment increased sharply in the wake of the 1998 Russian crisis as a result of the general economic slowdown; but the main reason for its persistence in 2000 appears to be a deepening of the process of enterprise restructuring in many countries which is often accompanied by job cuts. Other reasons for the sluggish labour demand in many transition economies are the large margins of spare capacity coupled with gains from labour productivity due to x-efficiency gains.[57]

At the end of August 2000, the total number of persons registered as unemployed in the ECE transition economies was over 17 million (some 7.6 million in eastern Europe, 350,000 in the Baltic states and 9.1 million in the CIS countries). The decline in the total since August 1999 (by some 5 per cent) mostly reflects the improvement in Russia since the number of unemployed grew by nearly 7 per cent in eastern Europe and by more than 14 per cent in the Baltic states.

In most *east European countries,* unemployment continued to grow during the first eight months of 2000 and during the winter five countries (Bulgaria, Croatia, the Czech Republic, Romania and Slovakia) reported their highest unemployment rates since the transition started in 1989. There was little improvement in the spring and summer, and in some countries the situation continued to deteriorate.

Slovenia was the only east European country where the growth of employment accelerated in the first half of 2000. Most of the new jobs were in services and construction (where employment grew by 3 and 15 per cent, respectively); in agriculture and industry employment continued to fall. The rate of unemployment declined fairly steadily and in August was 1.6 percentage points lower than a year earlier. Employment also increased in Hungary (by 0.7 per cent) in the first half of 2000[58] and the unemployment rate was falling and in August was 0.6 of a percentage point lower than a year ago.

Despite earlier fears, the unemployment rate in the Czech Republic did not reach the psychologically important double-digit level.[59] It peaked at 9.8 per cent in January 2000 and then declined thereafter to 8.8 per cent

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[55] The lat is pegged to the SDR which has appreciated against the euro and depreciated against the dollar at a more moderate rate than in most other transition economies.

[56] The collapse of the Russian rouble in August 1998 precipitated, with varying lags, reactive devaluations (nominal or effective) in a number of CIS countries.

[57] Over the period 1996-1999, the cumulative increase in labour productivity in industry ranged between 11 and 16 per cent in the Czech Republic, Lithuania, Slovakia and Slovenia; in Hungary, Latvia and Poland it grew by some 35 per cent, and in Estonia by more than 40 per cent. During the first half of 2000, the growth of industrial labour productivity accelerated considerably: in most of the east European and Baltic countries it grew at double-digit rates, and in Hungary and Poland the rate exceeded 20 per cent. UN/ECE secretariat calculations on the basis of national statistics.

[58] This was a slower rate of increase than in 1999.

[59] At the beginning of 2000, there were widespread expectations that due to the ongoing restructuring, banking privatization and a generally weak economic performance, unemployment would rise above 10 per cent in the early months of 2000, and reach 10.5-11 per cent by the end of the year.

TABLE 1.2.6

Total employment and registered unemployment in the transition economies, 1998-2000

(Percentage change over the same period of preceding year; per cent of labour force, end of period)

	Employment[a]				*Unemployment*			
			QI-QII			*1999*		*2000*
	1998	*1999*	*1999*	*2000*	*1998 December*	*August*	*December*	*August*
Eastern Europe	0.4	-1.4	-0.8	-2.9	12.6	13.8	14.6	14.6*
Albania	-2.0	-1.8	-2.1	-1.7	17.6	18.0[b]	18.2	17.1[b]
Bosnia and Herzegovina [c]	5.9	3.1	4.5	1.1	38.5	39.3	39.1	39.4
Bulgaria	-0.2	-2.6	-4.5	-10.0	12.2	13.6	16.0	18.0
Croatia	6.6	-0.4	-0.5	-2.2	18.6	19.1	20.8	20.8
Czech Republic	-1.5	-3.7	-3.4	-2.4	7.5	9.0	9.4	9.0
Hungary	1.4	3.1	3.6	0.7	9.1	9.4	9.6	8.8
Poland	2.3	-0.6	-0.1	-7.0	10.4	11.9	13.0	13.8
Romania [d]	-1.9	-0.6	-1.2	-0.5	10.3	10.9	11.5	10.1
Slovakia [e]	-1.0	-4.7	-1.7	-2.1	15.6	18.2	19.2	17.4
Slovenia	0.2	1.8	0.8	2.0	14.6	13.3	13.0	11.7
The former Yugoslav Republic of Macedonia	-2.9	1.8	-0.5	0.4	41.4	46.6	47*	..
Yugoslavia [f]	-0.1	-10.3	..	..	27.2	26.6[g]	27.4	26.6[g]
Baltic states	-0.5	-1.2	-1.2	-1.7	7.3	8.3	9.1	9.5
Estonia [h]	-1.3	-4.1	-4.4	-2.1	5.1	6.3	6.7	6.1
Latvia	0.6	-0.5	-1.4	0.6	9.2	9.8	9.1	8.1
Lithuania	-0.8	-0.5	0.2	-3.0	6.9	8.1	10.0	11.8
CIS	-1.1	-0.2	-0.6	-0.2	9.0	8.0	8.3	7.0
Armenia	-2.5	-1.3	-1.8	-1.6	8.9	11.3	11.5	11.4
Azerbaijan	0.2	–	0.1	–	1.4	1.2	1.2	1.1
Belarus	1.1	0.6	1.2	-1.4	2.3	2.1	2.0	2.1
Georgia	2.2	..	..	..	4.2	5.3	5.6	..
Kazakhstan	-5.3	-0.4	-0.3	-4.0	3.7	3.6	3.9	4.0
Kyrgyzstan	0.9	3.5	3.9	0.8	3.1	3.1	3.0	3.1
Republic of Moldova	-0.2	-9.0	-7.7	2.9	1.9	2.4	2.1	2.4
Russian Federation [i]	-1.5	0.5	-0.2	0.7	13.3	11.9	12.2	9.8
Tajikistan	0.3	-3.9	-3.2	-4.7	2.9	3.3	3.1	..
Turkmenistan	1.3	0.7	..	..	..	..	..	..
Ukraine	-1.1	-2.3	-2.4	-2.0	4.3	4.1	4.3	4.2
Uzbekistan	1.4	1.0	1.0	1.0	0.4	0.5	0.5	0.5
Total above	-0.9	-0.4	-0.6	-0.9	..	..	..	..
Memorandum items:								
CETE-5	1.2	-0.9	-0.4	-3.7	10.2	11.7	12.5	12.6
SETE-7	-0.7	-2.1	-1.5	-1.8	15.4	15.6	16.5	20.4*
Russian Federation[j]	..	..	..	..	2.7	1.9	1.7	1.4
Former-GDR	..	..	..	..	17.4	17.6	17.7	17.0

Source: National statistics; direct communications from national statistical offices to UN/ECE secretariat.

[a] Annual average unless otherwise stated. Regional quarterly aggregates of employment exclude Yugoslavia, Georgia and Turkmenistan.

[b] June.

[c] Figures cover only the Muslim-Croat Federation. Data for Republika Srpska are not available.

[d] Labour force survey employment data.

[e] End of year employment data.

[f] Since 1999 excludes Kosovo and Metohia.

[g] July.

[h] Unemployment: job seekers.

[i] Unemployment figures are based on monthly Russian Goskomstat estimates according to the ILO definition, i.e. including all persons not having employment but actively seeking work. The previously published figures have been revised in line with the results of the May 2000 labour force survey.

[j] Registered unemployment.

in September. The factors behind these developments were the strength of the recovery coupled with active labour market policies.[60] In Poland, despite strong output growth, the labour market continued to worsen during the first eight months of 2000.[61] At 13.8 per cent, the rate of unemployment in August 2000 was almost 2 percentage points higher than a year earlier. The rise in unemployment was mainly due to a wave of mass layoffs caused by restructuring in the coal mining, steel and textile industries as well as the ending of job guarantees in privatized firms.[62] Rising labour productivity has also reduced the demand for labour. The situation has been further aggravated by the fact that members of the baby boom of the first half of 1980s are now beginning to enter the labour market.[63] As in Poland, there was no improvement in the labour market in Slovakia either, despite the growth of industrial output. In the first half of 2000, the decline in employment accelerated, unemployment reached the alarmingly high level of 19.5 per cent in January. The latter subsequently fell to 17.4 per cent in August thanks to a new public works programme launched by the government.[64] This programme, however, is essentially a short-term measure and the reduction in unemployment is likely to be temporary.[65]

The situation in the labour markets of south-east Europe remains very difficult. In Bulgaria, as a result of further layoffs in firms undergoing restructuring, employment fell by some 10 per cent in the first half of 2000, the largest fall among all the transition economies, while the unemployment rate surged to 19 per cent in April. After a slight seasonal fall in the summer, it was still at 18 per cent in August, more than 4 percentage points higher than a year ago. The situation in Croatia also worsened considerably: the decline in employment accelerated and the unemployment rate reached a record 21.7 per cent in March 2000. These developments follow the steps undertaken by the new government to restructure the enterprise sector, accelerate privatization, and implement a tougher policy on bankruptcy. In Albania, the unemployment rate declined in the 12 months to June 2000 but it still stood at 17 per cent. However, the government expects a further reduction as a result of the introduction of projects to boost employment.[66] In Bosnia and Herzegovina, the unemployment rate was broadly unchanged in the 12 months to August 2000, but it remained at 39 per cent of the labour force. Moreover, an increased rate of return of refugees is likely to add further pressure on the labour market.[67] In Romania, where the economy is emerging from a three-year recession, there was some improvement in the labour market. In the first half of 2000, the decline in employment almost came to a halt while unemployment, after peaking at 12.2 per cent in February 2000, began to fall, albeit in part for seasonal reasons, to 10.1 per cent in August.

Regular and consistent data are not available for The former Yugoslav Republic of Macedonia and Yugoslavia, but in both countries there appears to have been a further worsening in 2000.[68] Although accurate estimates are not available, unemployment rates in both countries are undoubtedly very high.

In the *Baltic states,* the situation in the labour markets remains greatly varied, especially as regards unemployment. In Estonia, the fall in employment decelerated notably in the first half of 2000 and the unemployment rate, which peaked at 7.1 per cent in March, declined to 6.1 per cent in August, when it was virtually the same as a year earlier.[69] The improvement was even more pronounced in Latvia where employment resumed moderate growth in the first half of 2000 and unemployment, falling since April 1999, declined to 8.1 per cent of the labour force in August (its lowest level in the three years). In contrast, partly due to a combination of sluggish output growth and enterprise restructuring, the decline in employment accelerated in Lithuania and unemployment rose to a record 11.8 per cent in August, nearly 4 percentage points higher than 12 months earlier.

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[60] The fall in unemployment may also be partly due to a new scheme providing incentives for early retirement until the year's end, as well as the slower pace of labour shedding in some large enterprises especially in the steel and mining industries due to financial support from the government.

[61] After five years of relatively high growth, employment started to fall slightly in 1999. Recently issued figures by the Polish Central Statistical Office, based on the average paid employment time series (excluding agriculture), indicate that in the first half of 2000, total employment was 7 per cent lower than a year earlier. However, a survey-based measure of employment shows total employment falling by just over 3 per cent in the first half of 2000. *SG Warsaw*, 25 August 2000.

[62] The privatization of many Polish companies in the mid-1990s included contractual clauses limiting layoffs; these have now started to expire.

[63] New entrants to the labour market in 2000 are estimated at around 150,000. *Gazeta Wyborcza* (Warsaw), 23 February 2000.

[64] According to the amended law on employment (in force as of 1 August), Sk2.3 billion (some $45 million) is to be allocated from the state budget to communities with particularly high unemployment for the creation of temporary jobs in public works for the long-term unemployed. As of 15 September, nearly 60,000 such temporary jobs had been created and the number of officially registered unemployed persons had fallen by some 81,000 in August alone. *Reuters Business Briefing,* 4 October 2000.

[65] According to estimates of the National Employment Office, 95 per cent of those now working in public projects will become jobless again before the end of 2000. *CTK Business News,* 21 September 2000.

[66] The Albanian government allocated lek2 billion (some $14 million) from the budget for job creation particularly in public works in 1999 and 2000. According to the Minister of Labour and Social Affairs, nearly 70,000 people have been employed under these projects. *Reuters Business Briefing,* 4 October 2000.

[67] In July 2000 alone, 3,600 refugees from ethnic minorities returned to their pre-war homes, almost four times more than in the same period in 1999. *Oxford Analytica Brief,* 26 September 2000.

[68] In The former Yugoslav Republic of Macedonia, the most recent official data on unemployment refer to August 1999 when the estimated rate of registered unemployment was close to 47 per cent. Since then the number of unemployed has risen steadily and in August 2000 reached some 362,000 persons (a nearly 5 per cent increase). In the first half of 2000, the number of people officially reported as employed in the economy amounted to 315,000. Figures for quarterly employment in Yugoslavia for the first two quarters of 1999 are still not available. Starting from 1999, unemployment data exclude Kosovo and Metohia. Officially reported data show the unemployment rate unchanged between July 1999 and 2000 at 26.6 per cent. However, the number of unemployed increased by 8 per cent over this period reaching some 811,000 persons in July 2000.

[69] It should be kept in mind that the official figures for registered unemployment tend to underestimate the actual levels in the Baltic countries. Unemployment rates in May 2000, derived from labour force surveys based on the ILO definition of unemployment, stood at 13.2 per cent in Estonia (June), 14.4 per cent in Latvia and 14.7 per cent in Lithuania, whereas the registered rates were 6.2, 8.6 and 11.1 per cent, respectively.

Statistics for *registered* unemployment rates, which are the only available series for unemployment in most of the *CIS countries,* do not indicate any significant changes in the 12 months to August 2000. The rates varied between 0.5 per cent (Uzbekistan) and 4 per cent (Kazakhstan), the main exception again being Armenia (more than 11 per cent).[70] Russia is an exception to this pattern, with a marked improvement in the labour market situation, due to the strong recovery in output. The growth of employment, which started in the second half of 1999, accelerated during the first six months of 2000 and by mid-year was almost 1 per cent higher than a year earlier. By August, the unemployment rate, which had been falling since February 1999, fell below 10 per cent for the first time since 1996.

(v) International trade

(a) Eastern Europe and the Baltic states

The foreign trade of the east European and Baltic countries has recovered strongly after its slump in late 1998 and early 1999 in the wake of the Russian crisis and a period of slow economic growth in the EU. In the first half of 2000, the *dollar value of exports* of eastern Europe increased by some 14 per cent and that of the Baltic states by 22 per cent, following declines in 1999 (tables 1.2.2 and 1.2.7). Although growing rapidly, the value of the Baltic states' aggregate exports was only slightly above that in January-June 1998, just before the Russian crisis. In *volume terms,* growth rates were some 7-10 percentage points higher than those in value, a reflection of the sharp fall of dollar prices for most of the region's exportable goods. The weakness of the euro – in which most of the region's trade is denominated – relative to the dollar and the low level of inflation in the euro area depressed export values expressed in dollars.[71] Export growth, in both value and volume, was still strong at the start of the third quarter, although there was some slowdown in July-August in several countries (for the performance of individual countries see tables 1.2.2 and 1.2.8).

The main boost to exports has come from the EU, which in 2000 is expected to register its fastest rate of real GDP growth in over a decade. Strong import demand in Germany, the largest single export market for most east European and Baltic countries,[72] was particularly important. The buoyancy of growth in the EU was reflected in the expansion of Czech, Hungarian and Polish export volumes to the EU in January-June 2000 by some 20-22 per cent; the increase for Estonia was probably even larger.[73] For the Baltic countries this expansion secured some gain in market share in the EU, but for the majority of east European countries the recovery of exports was not sufficient to preserve their market shares: according to Eurostat data, in January-April 2000 the 10 transition economies negotiating EU accession accounted for 9.6 per cent of total extra-EU imports, nearly a quarter of a percentage point less than in 1999.[74]

The dollar value of east European exports to the CIS and other transition economies also grew more strongly in the first half of 2000 (by some 15-16 per cent year-on-year). However, the increase among east European countries was relatively modest in absolute terms and did not translate into any significant gain in market share, while the rapid growth of exports to the CIS largely reflected recovery from the low levels to which exports had fallen following the Russian crisis.[75] In fact, despite this strong growth, east European exports to Russia and other CIS countries remained substantially below – some 45–55 per cent – their levels of January-June 1998.[76] The Baltic countries' exports to the CIS, however, continued to fall while their mutual trade and their exports to east European partners grew rapidly (table 1.2.7).

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[70] These figures, however, are misleading both as regards the magnitude and the dynamics of unemployment since a large proportion of the jobless in these countries do not register for various reasons (according to estimates, this proportion varies in different countries between 40 to 80 per cent). For a more detailed discussion see UN/ECE, *Economic Survey of Europe, 1998 No. 3*, p. 70. Thus, in May 2000, unemployment rates calculated on the basis of labour force surveys stood at 10.2 per cent in Russia, 11.4 per cent in Ukraine (June) and, according to some estimates, exceeded 10 per cent in the Republic of Moldova (March) and Kyrgyzstan, compared to rates of 1.4, 4.4, 2.4 and 3.2 per cent, respectively, on the basis of the registration figures. Direct communication from national statistical offices for Russia and Ukraine; TACIS, *Moldovan Economic Trends*, April/June 2000, p. 23; Economist Intelligence Unit, *Country Report. Kyrgyzstan* (London), July 2000.

[71] In the first half of 2000, the euro was on average 13.5 per cent down relative to the dollar, compared with the first half of 1999.

[72] In 1999 Germany accounted for 36-42 per cent of the exports of the Czech Republic, Hungary and Poland and for 16-17 per cent of those of Croatia, Latvia and Lithuania.

[73] Although no reliable volume or unit value indicators by partners and commodities are available, estimates suggest that the export volume growth from Croatia, Latvia, Lithuania and Slovakia to the EU increased by some 20-25 per cent.

[74] Eurostat, *Intra- and Extra-EU Trade*, CD-Rom No. 7, Theme 6: External Trade, 2000.

[75] With the base-period effect decreasing in importance, the year-on-year growth rates have been decelerating: in the first quarter, for instance, east European exports to the CIS grew by 19 per cent, in the second by 12 per cent.

[76] The fastest growth in the dollar value of exports to Russia and the other CIS countries was from Romania (2.3 times) and Hungary (29 per cent). Hungary benefited from an agreement with Gazprom signed in the spring of 1999 under which the latter buys food and pharmaceutical products from Hungarian companies equal in value to its gas shipments (at pre-set levels). Gazprom has since bought $20-$25 million worth of Hungarian products, according to Mr. P. Ballas, deputy state secretary at the Ministry of Foreign Affairs of Hungary. *MTI-ECONEWS,* 22 September 2000, as reported by *Reuters News Service*.

TABLE 1.2.7

Foreign trade of the ECE transition economies by direction, 1998-2000

(Value in billion dollars, growth rates in per cent)[a]

	Exports				*Imports*			
	Value	*Growth rates*			*Value*	*Growth rates*		
Country or country group[b]	*1999*	*1998*	*1999*	*2000*[c]	*1999*	*1998*	*1999*	*2000*[c]
***Eastern Europe**, to and from:*[d]								
World	115.1	9.2	0.4	14.2	148.5	9.1	-1.4	11.6
ECE transition economies	22.5	-5.0	-15.3	15.3	26.5	-3.9	-3.7	34.1
CIS	4.2	-20.6	-41.7	15.5	11.5	-16.4	-1.7	68.9
Baltic states	0.9	11.8	-0.2	15.8	0.3	22.6	32.1	103.8
Eastern Europe	16.9	1.8	-7.3	15.2	14.5	4.7	-6.3	11.5
Developed market economies	85.3	16.8	5.5	13.8	107.7	13.2	-1.1	6.2
European Union	78.4	17.2	5.2	13.5	94.5	14.1	-1.1	5.4
Developing economies	7.0	-7.3	-0.2	17.0	13.4	9.7	-0.3	11.0
***Baltic states**, to and from:*								
World	7.7	3.4	-12.6	22.3	11.9	7.5	-13.9	15.0
ECE transition economies	2.4	-13.0	-35.1	12.5	3.9	-2.8	-10.8	26.8
CIS	1.1	-23.4	-51.5	-11.2	2.3	-11.3	-14.2	39.9
Baltic states	1.0	11.8	-12.6	26.4	0.7	19.8	-6.4	8.8
Developed market economies	5.0	21.0	5.7	26.8	7.3	13.7	-15.5	9.6
European Union	4.4	20.1	5.3	26.2	6.2	12.0	-15.7	11.2
Developing economies	0.3	13.2	-15.7	26.6	0.7	6.5	-14.5	8.4
***Russian Federation**, to and from:*								
World	71.8	-16.2	0.7	53.7	30.2	-17.9	-30.7	6.8
Intra-CIS	10.7	-17.9	-22.0	48.0	8.3	-20.9	-26.3	42.5
Non-CIS economies	61.1	-15.8	6.1	54.7	21.8	-16.8	-32.3	-5.0
ECE transition economies	11.0	-21.9	5.9	81.5	2.1	-27.7	-45.4	5.4
Baltic states	2.8	-28.0	24.9	107.7	0.3	-33.4	-56.3	1.1
Eastern Europe	8.2	-20.0	0.7	73.5	1.8	-26.3	-43.0	6.1
Developed market economies	35.2	-13.8	1.7	51.3	14.9	-17.0	-32.3	-5.9
European Union	24.0	-17.1	3.5	74.7	10.8	-19.6	-31.4	-13.0
Developing economies	14.9	-15.8	18.3	44.6	4.8	-7.8	-24.6	-6.5
***Other CIS economies**, to and from:*								
World	30.2	-12.9	-4.7	36.7	30.8	-8.7	-4.7	24.4
Intra-CIS	10.8	-22.0	-21.2	40.1	15.6	-14.3	-21.2	31.2
Non-CIS economies	19.4	-4.4	7.9	34.8	15.2	-1.9	7.9	16.8
***ECE transition economies**, to and from:*								
World	227.9	-3.4	-1.3	29.3	228.8	0.5	-9.9	13.6

Source: National statistics and direct communications from national statistical offices to UN/ECE secretariat; for the Russian Federation, State Customs Committee; for CIS economies, CIS Interstate Statistical Committee; for Turkmenistan, *Sotsialno-ekonomicheskoe polozhenie Turkmenistana*, various issues; for Uzbekistan, UN/ECE estimates.

[a] Growth rates are calculated on values expressed in dollars.

[b] The aggregate growth rates for eastern Europe are slightly different from table 1.2.2. "Eastern Europe" in the present table refers to Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia. For lack of adequate data, the trade of Bosnia and Herzegovina, The former Yugoslav Republic of Macedonia and Yugoslavia is not covered. In the partner country grouping, "ECE transition economies" cover the east European countries including the successor states of the former SFR of Yugoslavia, the Baltic states and CIS.

[c] January-June over same period of 1999.

[d] The aggregate growth rates for January-June 2000 are calculated taking into account Czech foreign trade data according to the new methodology.

In addition to strong western import demand, other factors were also important for the general rise in exports. In some east European countries and in Estonia, domestic currencies not only depreciated in real terms against the dollar but also remained unchanged or appreciated just slightly against the euro, which strengthened their export competitiveness.[77] Cost competitiveness also improved markedly in a number of countries: wage growth was rather restrained during 1999 while enterprise restructuring and the adoption of new technologies now appear to be boosting productivity (see table 1.2.5 above), resulting in lower unit labour costs, particularly in manufacturing. However, the improvement of productivity tends to be concentrated in just a few industries, thus widening the productivity gap between a relatively small number of highly efficient (mostly

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[77] In January-June 2000, the domestic currencies of the east European and Baltic countries, except Romania and Slovakia, depreciated in real terms, year-on-year, against the dollar; against the euro, the currencies of Croatia, Estonia and Slovenia remained unchanged in real terms and those of the Czech Republic and Hungary appreciated moderately, by 4-5 per cent. UN/ECE secretariat computations.

TABLE 1.2.8

Changes in the volume of foreign trade in selected transition economies, 1996-2000

(Per cent)

	Exports						Imports					
					2000[a]						2000[a]	
	1996	1997	1998	1999	Jan.-Mar.	Jan.-Jun.	1996	1997	1998	1999	Jan.-Mar.	Jan.-Jun.
Czech Republic	2.7	14.2	14.4	9.7	27.4	19.2	10.7	7.6	8.5	5.8	13.6	18.2
Hungary	4.6	29.9	22.5	15.9	18.3	21.2	5.5	26.4	24.9	14.3	16.5	18.1
Transition economies	-0.2	25.2	4.7	-9.3	16.3	22.7	2.8	5.3	12.1	6.0	15.4	15.5
European Union	5.7	33.6	24.1	20.6	19.5	22.3	4.0	29.7	23.8	14.6	10.9	12.0
Poland	9.7	13.7	2.3	2.0	25.0	20.4	28.0	22.0	14.3	4.4	16.7	12.8
Transition economies	29.0	35.8	-5.0	-9.3	29.9	21.3	19.3	13.5	12.6	7.8	20.7	16.4
European Union	5.7	11.9	8.5	5.4	24.9	21.2	27.3	25.2	16.2	4.1	18.1	12.6
Slovenia[b]	3.1	11.4	8.4	2.4	12.8	11.8	–	9.6	10.4	7.5	9.8	6.0
Estonia[c]	6.7	51.1	9.6	-4.9	30.8	32.6	..	..	9.5	-10.6	28.6	34.5
Latvia	8.7	20.3	10.1	-2.1	13.9	15.5	..	..	21.3	-3.2	4.6	6.5
Russian Federation	0.1	1.8	-0.3	9.4	9.3	10.0	-1.9	21.1	-11.0	-15.6	22.7	23.1
Non-CIS	3.6	1.8	-0.6	11.3	5.9	7.1	-0.1	31.7	-8.4	-19.4	18.4	19.0
CIS	-15.6	1.9	0.8	1.5	26.3	27.2	-6.2	-1.8	-18.4	-4.8	36.3	35.3

Source: UN/ECE secretariat calculations, based on national foreign trade statistics.

[a] Over same period of 1999.

[b] Volume indices for Slovenia as reported by IMAD, *Slovenian Economic Mirror*, Vol. III, 1997; Vol. VI, 2000 and *Spring Report*, 2000.

[c] Although for basic trade statistics Estonia switched to the "special trade" reporting system as from 1 January 2000, volume indices in this table were calculated on export and import values under the "general trade" reporting system in order to be consistent with the data used in tables 1.2.2 and 1.2.7. According to the data under the "special trade" reporting system, Estonia's export and import volumes grew by 35 and 31 per cent, respectively, in January-March and by 37 and 34 per cent in January-June 2000, year-on-year.

foreign owned) companies, oriented almost entirely towards exports, and the rest of the economy, often dominated by heavily-indebted companies with restricted access to the fresh capital needed for restructuring and successful competition in international markets.[78]

The *total dollar value of imports* of the east European and Baltic countries grew by 12 per cent in January-June 2000, following a 3 per cent decline in 1999.[79] This growth, although less than that of exports, reflected the changing pattern of demand in these economies. On the one hand, imports of consumer and certain capital goods continued to stagnate in the early part of 2000, partly because of relatively weak private expenditure and investment in some countries.[80] On the other hand, since imports tend to be highly correlated with exports (because of the high import content of these countries' exports and their engagement in outward processing trade), imports accelerated in line with the recovery of manufacturing activity and in some countries even outpaced the growth in the value of exports. The volume of imports, however, was generally growing more slowly than exports (tables 1.2.2 and 1.2.8).

The value of imports was considerably inflated by the sharp rise in international oil prices, whereas the average dollar prices for imports of manufactured goods were falling, mainly because of the weakness of the euro.[81] All in all, the year-on-year decline in dollar unit values was less pronounced for imports than for exports: in the first half of 2000, average import prices were only 2-5 per cent below their level of a year earlier, which implies a significant deterioration in the region's terms of trade.

While the strong growth of imported components by east European and Baltic manufacturers have increased the dominance of the EU as a source of imports for these countries, the higher prices for energy were the key factor in raising the share of Russia and other energy-exporting CIS states in total imports. Having fallen to about 7 and 19 per cent in the first half of 1999, the Russian and CIS share in east European and Baltic imports was above 10 and 23 per cent, respectively, in

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[78] This has resulted in a rather narrow export base in some countries: in Estonia, for instance, mobile phones and their parts, produced by a subsidiary of the Finnish company Elcoteq, accounted for about 25 per cent of total exports in the first half of 2000, while in Slovakia and Slovenia exports of vehicles and spare parts by the VW subsidiary in the former and the Renault subsidiary (Revoz) in the latter accounted for 15-22 per cent of total exports. Although a wider range of foreign investors operate in Hungary, exports of electrical equipment (including office machines and equipment for telecommunications) accounted for one third of total exports in January-June 2000.

[79] In some countries, the data for July-August point to a further acceleration of imports due to the increasing bill for fuel imports and also to some pick-up in imports of consumer goods.

[80] Protective measures may also have had an influence: for example, the import surcharge, albeit reduced, in Slovakia; and protective import tariffs and/or quotas for agricultural goods in Latvia, Poland and some other countries.

[81] Dollar unit values of manufactured goods exported from west European countries – the major sources of imports into eastern Europe and the Baltic states – fell by some 6 per cent between the first halves of 1999 and 2000 (United Nations, *Monthly Bulletin of Statistics*, Vol. 53, No. 9, September 2000), while world energy prices, in dollars, increased some 80 per cent over the same period (Hamburg Institute of Economic Research, direct communication).

January-June 2000, their highest levels since early 1998. Increased purchases within the east European region, mainly of food and agricultural products and some consumer manufactures, resulted in a small increase in the share of intra-trade in the region's total imports.

The *merchandise trade deficit* of the east European and Baltic countries as a whole in January-June 2000 amounted to $19.6 billion, $0.8 billion more than in the first half of 1999. There were some exceptions to this general trend: the deficits were in fact reduced in Croatia, Lithuania, Romania, Slovakia and Slovenia. In the other east European and Baltic countries, the deficits of the Czech Republic and Yugoslavia doubled from between the first halves of 1999 and 2000 and that of Poland widened considerably, by $0.5 billion. The region's aggregate merchandise trade deficit with developed market economies was significantly reduced (from $11.4 billion to $8.7 billion) but in trade with the CIS countries the deficit widened (from $3.4 billion to $6.8 billion) mainly because of the large increase in the value of imports, especially of oil and gas.

(b) International trade of the CIS countries

In contrast to the first half of 1999, favourable external conditions – higher real demand and rising commodity prices – have led to improved export performance by many CIS countries, although since trade in the first half of 1999 was depressed in the wake of the Russian financial crisis, the subsequent recovery somewhat overstates the underlying improvement in CIS trade.

In the first half of 2000, the dollar value of *total merchandise exports from the CIS countries* increased by almost 50 per cent (table 1.2.2). All the CIS countries (except Uzbekistan) shared in this improvement – exports more than doubling in Azerbaijan and Kazakhstan and rising by 50-70 per cent in Georgia, Russia and Turkmenistan. *Total imports* also increased across the board, with the exception of Kyrgyzstan, and were 16 per cent above their level in the same period of 1999. The CIS area's merchandise *trade surplus* more than doubled to about $33 billion, almost exclusively due to a very large surplus in Russia.

The exports of many CIS commodity producing countries (such as Azerbaijan, Kazakhstan, Russia, Tajikistan and Turkmenistan) increased substantially in the first six months of 2000, largely because of windfall gains from higher world commodity prices.[82] In addition, given the global upturn in the real demand for commodities, CIS oil and metal producers were able to increase shipments. Thus the volume of Kazakhstan's oil exports increased by a third while oil revenues more than tripled.[83] In Russia, a small 3 per cent volume increase was accompanied by a more than a doubling of oil export revenues.[84] While Turkmenistan's exports of natural gas increased by over 50 per cent in volume and value (shipped at a fixed contract price with Russia's Gazprom), lower volumes of oil and oil products did not prevent a tripling of export revenues from these commodities.[85] Similarly, in Tajikistan, where aluminium represents more than half the country's exports, the value of exports increased by a third because of the higher aluminium prices.

However, the prices of other commodities such as gold and cotton – key export items in central Asia – were basically unchanged from the first half of 1999. As a result, the export revenues of Kyrgyzstan (where gold makes up 40 per cent of exports) and Uzbekistan (where gold and cotton represent about 70 per cent of exports) were essentially unchanged. In Kyrgyzstan exports rose by 4 per cent despite the lower volumes of food and tobacco products and Uzbekistan's exports were down by 2 per cent – the result of lower cotton exports, only partly offset by increased exports of metals and machinery.

For the remaining CIS countries, exports increased essentially in response to the improvement in the CIS economic growth during the first half of the year. The strong upturn in Russia – the economic engine for its regional neighbours by virtue of it taking one third of total CIS exports – boosted Russia's demand for CIS exports (table 1.2.9) and the export performance of countries that rely heavily on intra-CIS trade (such as Belarus, Georgia, Kazakhstan, the Republic of Moldova, Tajikistan and Ukraine).

While total CIS imports increased by 16 per cent, growth in the first half of 2000 varied substantially among countries, the increases ranging from 3 per cent year-on-year (Georgia and Tajikistan) to 22-40 per cent in Azerbaijan, Belarus, Kazakhstan, the Republic of Moldova, Turkmenistan and Ukraine. Among the countries with the largest increases in total imports, rising imports of energy (Belarus, the Republic of Moldova and Ukraine) and machinery and equipment (Azerbaijan, Kazakhstan and Turkmenistan) accounted for most of the increases.

In the first half of 2000, the dollar value of Russian and other CIS countries' *exports to non-CIS countries* increased by 50 per cent (table 1.2.9). Traditional commodity exporters such as Azerbaijan, Kazakhstan, Russia and Turkmenistan increased their export values by between 55 per cent (Russia) and 238 per cent (Azerbaijan),

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[82] In the first six months of 2000 the price of crude oil was up 65 per cent year-on-year; the prices of base metals also rose considerably: that of aluminium was up by 25 per cent, copper by 23 per cent and nickel by 91 per cent. Russia's natural gas exports fetched over 50 per cent more relative to the first half of 1999. IMF, *International Financial Statistics* (Washington, D.C.), September 2000.

[83] Agency of Statistics of the Republic of Kazakhstan, *Sotsial'no-ekonomicheskoe polozhenie Respubliki Kazakhstan* (Astana), July 2000, p. 39. This increase in shipments was made possible by transit quota increases negotiated with Transneft, the Russian state owned pipeline operator.

[84] Russian Federation Goskomstat, *Sotsial'no-ekonomicheskoe polozhenie Rossii* (Moscow), January-July 2000, p. 103.

[85] Turkmenistanprognoz, *Sotsial'no-ekonomicheskoe polozhenie Turkmenistana* (Ashgabad), January-July 1999 and January-July 2000.

TABLE 1.2.9

CIS countries' trade with CIS and non-CIS countries, 1999-2000

(Value in million dollars, growth rates in per cent)

	Export growth		*Import growth*		*Trade balances*		
	1999	*2000*[a]	*1999*	*2000*[a]	*1999*	*1999*	*2000*[a]
Armenia							
Non-CIS	25.6	20.4	-6.9	18.5	-450	-192	-226
CIS	-29.8	5.8	-23.7	-1.8	-119	-62	-58
Azerbaijan							
Non-CIS	92.0	238.3	5.8	37.8	8	-102	234
CIS	-9.1	59.2	-19.6	19.4	-114	-66	-49
Belarus							
Non-CIS	19.7	27.9	-20.5	11.0	-95	-18	173
CIS	-29.5	22.0	-22.9	47.9	-647	-246	-804
Georgia							
Non-CIS	53.6	86.8	-38.9	4.0	-246	-130	-95
CIS	0.1	39.3	-15.8	-0.1	-118	-67	-49
Kazakhstan							
Non-CIS	26.5	102.6	-8.8	6.7	2 043	574	2 046
CIS	-32.6	113.7	-22.6	55.1	-133	-227	-26
Kyrgyzstan							
Non-CIS	-4.4	1.6	-15.0	-15.3	-70	-12	13
CIS	-20.5	8.4	-41.2	6.1	-76	-32	-32
Republic of Moldova							
Non-CIS	3.0	-2.8	-41.0	65.7	-135	-47	-139
CIS	-41.0	27.0	-48.0	9.2	24	-9	9
Tajikistan							
Non-CIS	-5.1	19.2	-44.0	-55.2	225	53	148
CIS	55.3	45.8	15.4	34.5	-200	-77	-89
Turkmenistan							
Non-CIS	58.0	91.6	84.6	58.7	-280	-138	-128
CIS	221.5	52.3	4.7	-4.4	-11	140	355
Ukraine							
Non-CIS	-1.3	13.3	-24.7	25.3	3 227	1 823	1 812
CIS	-22.6	31.3	-14.6	20.3	-3 491	-1 974	-2 223
Uzbekistan							
Non-CIS	-15.5	-16.1	-7.3	-1.0	-45	80	-78
CIS	10.9	40.8	-13.6	51.5	131	-3	-41
Total above							
Non-CIS	7.9	34.8	-15.9	16.8	4 181	1 891	3 759
CIS	-21.2	40.1	-18.3	31.2	-4 753	-2 622	-3 006
Russian Federation							
Non-CIS	6.1	54.7	-32.3	-5.0	39 283	15 556	30 548
CIS	-22.0	48.0	-26.3	42.5	2 350	990	1 665
CIS total							
Non-CIS	6.5	49.8	-26.4	3.3	43 464	17 447	34 333
CIS	-21.6	44.0	-21.3	34.9	-2 403	-1 633	-1 342

Source: CIS Statistical Committee, *Express-Doklad*, August 2000. For the Russian Federation, Russian Federation State Customs Committee, *Tamozhennaya statistika vneshnei torgovli Rossiiskoi Federatsii*, No. 2 (Moscow), 2000. For Turkmenistan, *Sotsialno-ekonomicheskoe polozhenie Turkmenistana*, various issues. For Uzbekistan, UN/ECE estimates.

[a] January-June.

reflecting the much higher prices of crude oil, oil products and base metals. In Russia, a 7 per cent increase in export volume was accompanied by a 40 per cent increase in average export prices. In the other CIS countries, non-CIS exports increased between 13 and 28 per cent, except in Kyrgyzstan (where they were flat) and the Republic of Moldova and Uzbekistan where they declined.

CIS countries' *imports from non-CIS* countries rose by 3 per cent. The dollar value of non-CIS imports increased strongly in Armenia, Azerbaijan, the Republic of Moldova, Turkmenistan and Ukraine. Russia's non-CIS imports rose in volume by 20 per cent but were more than offset by lower import unit values.

In the first half of 2000, the value of *intra-CIS trade* increased by some 40 per cent. The increase reflects a recovery from the dramatic decline in mutual trade in the first half of 1999 caused by the Russian financial crisis and the subsequent contraction of import demand for consumption as well as industrial goods. Despite the recent large increases, the dollar value of intraregional trade in the first half of 2000 was still below its pre-crisis level.

The countries with a larger share of the Russian market benefited most from its strong recovery. Belarussian exports – of which 50 per cent goes to Russia – increased by 22 per cent in value. Ukraine's key export items, ferrous metals and chemicals, increased in value by 34 and 46 per cent, respectively,[86] with most of them going to Russia. Kazakhstan's exports doubled, with a quadrupling of wheat exports in volume and value terms and a tripling in the value of crude oil.[87] Turkmenistan's CIS exports were up 50 per cent on the strength of natural gas sales to Russia. Finally, higher energy prices accounted for much of the increase in imports in many CIS countries, particularly Belarus, the Republic of Moldova and Ukraine.

(vi) Current accounts and external financing

There has been a marked improvement in the external financial situation of many transition economies. A number of these countries have been running current account deficits on a scale which has caused concern, but in the first half of 2000 these have diminished, while most of the CIS fuel exporters are now in surplus. With the major exception of Russia, capital inflows have continued at a relatively high level rate, thanks to FDI and improved access to the financial markets. As a result, official reserves have increased, including in countries which in the past have frequently lacked sufficient liquidity. Nevertheless, several economies continue to face serious financial constraints, generally because foreign investment has been discouraged by slow economic reform, the absence of IMF programmes and political uncertainty. Moreover, a number of CIS countries remain in arrears on their obligations to Russia, while Russia has sought arrangements with western creditors.[88]

(a) Current account developments

The increase in international fuel prices has transformed the combined current account of the ECE

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[86] Derzhavniy Komitet Statistiki Ukrainy, *Statistical Bulletin* (Kiev), January-July 2000.

[87] Agency of Statistics of the Republic of Kazakhstan, *Sotsial'no-ekonomicheskoe polozhenie Respubliki Kazakhstan* (Astana), July 2000, p. 42.

[88] Russia has reached an agreement with the London Club of commercial bank creditors, which involves write-off and restructuring of Soviet-era debt.

TABLE 1.2.10

Current account balances of the ECE transition economies, 1999-2000

(Million dollars, per cent)

	Million dollars			*Per cent of GDP*	
		January-June			*Jan.-Jun.*
	1999	*1999*	*2000*	*1999*	*2000*
Eastern Europe [a]	-20 333	-10 226	-9 507	-5.5	-5.4
Albania	-155	48	-175	-4.2	-9.2
Bosnia and Herzegovina	-2 191	-1 015	-950*	-49.9	-53.1*
Bulgaria	-686	-456	-428	-5.5	-8.1
Croatia	-1 523	-1 141	-711	-7.5	-7.7
Czech Republic	-1 029	-338	-724	-1.9	-3.0
Hungary	-2 076	-1 220	-826	-4.3	-3.6
Poland	-11 569	-5 001	-5 638	-7.4	-7.4
Romania	-1 296	-796	-432	-3.8	-2.9
Slovakia	-1 083	-731	-156	-5.5	-1.6
Slovenia	-783	-545	-257	-3.9	-2.7
The former Yugoslav Republic of Macedonia	-135	-46	-160*	-3.9	-9.3*
Yugoslavia	-1 220	-500*	-800*	-7.4	-6.5*
Baltic states	-2 134	-952	-546	-9.7	-4.9
Estonia	-294	-157	-135	-5.7	-5.5
Latvia	-646	-229	-186	-10.3	-5.6
Lithuania	-1 194	-565	-225	-11.2	-4.2
CIS	23 732	7 375	23 061	8.7	16.3
Armenia	-307	-122	-198	-16.6	-30.2
Azerbaijan	-600	-485	-49	-15.0	-2.4
Belarus	-257	-38	-132	-2.4	-3.3
Georgia	-195	-123	-50*	-7.1	-3.6*
Kazakhstan	-171	-614	500*	-1.1	6.7*
Kyrgyzstan	-185	-75	-30*	-15.2	-6.7*
Republic of Moldova	-23	-9	-54	-2.0	-10.5
Russian Federation	25 301	8 663	22 964	13.7	22.2
Tajikistan	48	-55	60*	4.4	17.7*
Turkmenistan	-700*	-230*	50*	-21.4*	2.4*
Ukraine	834	443	200*	2.8	1.5*
Uzbekistan	-14	20*	-200*	-0.1	-3.4*
Total above [a]	1 264	-3 802	13 009	0.2	4.0
Memorandum items:					
CETE-5	-16 539	-7 835	-7 601	-5.6	-5.3
SETE-7 [a]	-3 794	-2 391	-1 905	-5.1	-5.8

Source: National balance of payments statistics; IMF for Azerbaijan (1999-2000), Bosnia and Herzegovina (1996-1998); the Economist Intelligence Unit for Yugoslavia.

Note: UN/ECE secretariat estimates for January-June 2000 reflect changes in merchandise trade balances. Estimates for The former Yugoslav Republic of Macedonia, Kazakhstan, Kyrgyzstan and Ukraine also incorporate first quarter 2000 results.

[a] Aggregates exclude Bosnia and Herzegovina and Yugoslavia.

transition economies.[89] In the first half of 2000, a surplus of $13 billion was reported, compared with a deficit of nearly $4 billion in the same period in 1999 (table 1.2.10). The bulk of this was due to the improved balances of oil exporters, above all Russia. Most non-fuel exporters also reported improved current accounts due to more buoyant external demand (section 1.2(v)). The latter contributed to the surge in the export of goods and services and, indirectly, to the record output growth in the region. Rising fuel prices tended to exacerbate the current account imbalances of fuel importers, but their deficits generally declined nonetheless. Fewer countries were affected by severe constraints on the current account than in 1999.

TABLE 1.2.11

Trade in goods and services in the ECE transition economies, 1999-2000

(Per cent change, billion dollars)

	Exports (per cent)		*Imports (per cent)*		*Balances (billion dollars)*		
		Jan.-Jun.[a]		*Jan.-Jun.*[a]		*Jan.-Jun.*	
	1999	*2000*	*1999*	*2000*	*1999*	*1999*	*2000*
Eastern Europe [b]							
Goods and services	-4	11	-3	9	-24.4	-12.0	-11.7
Goods	-3	12	-4	10	-27.4	-12.5	-12.8
Services	-5	4	3	–	2.9	0.6	1.1
Baltic states							
Goods and services	-10	21	-12	12	-2.1	-0.9	-0.5
Goods	-14	26	-13	15	-3.3	-1.4	-1.2
Services	-2	10	-7	-1	1.2	0.6	0.7
3 European CIS [c]							
Goods and services	-11	18	-21	23	0.5	0.5	0.1
Goods	-12	21	-22	23	-1.2	-0.5	-0.9
Services	-7	7	-9	21	1.7	1.0	0.9
Russian Federation							
Goods and services	-3	45	-29	11	32.3	11.6	25.4
Goods	1	51	-31	5	36.2	13.3	28.8
Services	-27	2	-20	29	-3.9	-1.8	-3.4
Asian CIS							
Goods and services	..	..	..	..	..	..	..
Goods	9	67	-12	20	-1.1	-1.2	1.1
Services	..	..	..	..	..	..	..

Source: UN/ECE secretariat, based on national balance of payments statistics.

[a] Over same period in 1999.

[b] Excludes Bosnia and Herzegovina and Yugoslavia.

[c] Belarus, Republic of Moldova and Ukraine.

The dollar value of east European and Baltic exports of goods and services rebounded in the first half of 2000, rising by 11 and 21 per cent, respectively (table 1.2.11). This was also true of imports although the pace of expansion was considerably less. The growth of merchandise trade considerably outpaced that of services, with imports of services stagnating in dollar terms.[90] In eastern Europe, the recent increase in the surplus on services reversed a long-term decline due to growing expenditures on business services. On the other hand, the combined surplus of the Baltic states has risen steadily, due to earnings from transit services between the Baltic ports and the CIS. In the Baltic states the large current account deficits of 1997-1999 have been roughly halved. In some countries the smaller current account deficits were partly the result of tighter macroeconomic policies. However, there was a further increase in the large current account deficit of Poland, where the merchandise trade and services balance has deteriorated steadily and, until recently, there was also a loss of net receipts from cross-border trade with Russia and other CIS countries. In the Czech Republic the increased deficit was due to a boom in imports which has been attributed to higher fuel prices and the quickening of output growth. A surge in merchandise exports and the resumption of capital inflows has softened the financial constraints that had faced Romania and The former Yugoslav Republic of Macedonia in 1999. In the latter, the current account deficit has reverted to the size prevailing prior to the Kosovo conflict (despite a marked increase in transfers), but in Romania the deficit has continued to fall (in part because of larger transfers).

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[89] This section is based on balance of payments statistics whereas merchandise trade data based on customs returns are used in section 1.2(v).

[90] As noted in section 1.2(v), the appreciation of the dollar versus the euro implies that the volume growth rates of merchandise trade (and probably services as well) were some 7-10 percentage points greater than those implied by the nominal values in current dollars.

The record $23 billion current account surplus reported by Russia in the first half of 2000 – a $14 billion increase from the same period of 1999 – resulted entirely from the increased value of merchandise exports. However, the long-term decline in the deficit on services was reversed as spending on foreign travel accelerated. It is notable that the boom in domestic output has occurred despite the huge transfer of resources abroad represented by the current account surplus. In Belarus, the Republic of Moldova and Ukraine the tight financial situation has loosened somewhat with the sharp upturn in exports of goods and services – they rose by some 18 per cent – and a small inflow of funds. As a result, imports of goods and services rebounded and the current accounts deteriorated. In 1999 these countries were subject to a financial squeeze characterized by a collapse of exports, a cessation of capital flows and a narrowing of current account deficits (Ukraine moving to surplus).

Only fragmentary data are available for the Asian CIS countries, but they indicate a general improvement in current account balances, with the fuel exporters, Kazakhstan and Turkmenistan, posting surpluses. Azerbaijan, however, remained in deficit due to the first repatriation of profits by foreign oil companies.

TABLE 1.2.12

Net capital flows into the ECE transition economies, 1999-2000

(Billion dollars, per cent)

	Capital and financial account flows [a]					*Changes in official reserves* [b] *(billion dollars)*	
	Billion dollars			*Capital flows/GDP*			
		Jan.–Jun.			*Jan.–Jun.*		*Jan.–Jun.*
	1999	*1999*	*2000*	*1999*	*2000*	*1999*	*2000*
Eastern Europe [c]	26.5	10.7	11.2	7.1	6.4	6.2	1.7
Albania	0.3	–	0.2	7.6	9.8	0.1	–
Bosnia and Herzegovina	0.4	-0.2	..	8.2	..	-1.8	..
Bulgaria	1.2	0.4	0.5	9.8	9.1	0.5	0.1
Croatia	2.0	1.1	1.0	9.7	10.7	0.4	0.3
Czech Republic	2.7	0.6	1.5	5.0	6.0	1.7	0.7
Hungary	4.4	1.8	1.0	9.1	4.3	2.3	0.2
Poland	11.7	5.2	4.9	7.5	6.4	0.2	-0.8
Romania	1.5	0.1	0.8	4.3	5.4	0.2	0.4
Slovakia	1.8	1.0	0.9	9.1	9.7	0.7	0.8
Slovenia	0.7	0.5	0.3	3.5	3.6	-0.1	0.1
The former Yugoslav Republic of Macedonia	0.3	0.1	0.2*	8.0	11.1*	0.1	–*
Yugoslavia	..	..	..	..	..	..	..
Baltic states	2.2	1.0	0.7	10.1	6.6	0.1	0.2
Estonia	0.4	0.1	0.1	8.5	5.4	0.1	–
Latvia	0.8	0.4	0.2	12.7	5.7	0.1	–
Lithuania	1.0	0.4	0.4	9.4	7.8	-0.2	0.2
CIS	-21.2	-6.7	..	-7.8	..	2.6	..
Armenia	0.3	0.1	..	17.8	..	–	..
Azerbaijan	0.8	0.7	–	20.7	-0.2	0.2	-0.1
Belarus	0.2	–	0.2	2.1	5.3	–	0.1
Georgia	0.2	0.1	..	6.0	..	–	..
Kazakhstan	0.2	0.2	..	1.6	..	0.1	..
Kyrgyzstan	0.2	0.1	..	20.3	..	0.1	..
Republic of Moldova	0.1	–	0.1	6.5	13.5	0.1	–
Russian Federation	-23.5	-8.0	-13.6	-12.7	-13.2	1.8	9.3
Tajikistan	-0.1	–	..	-5.1	..	–	..
Turkmenistan	0.8*	0.3*	..	23.4*	..	0.1*	..
Ukraine	-0.6	-0.2	0.2[d]	-1.9	3.0[d]	0.3	–[d]
Uzbekistan	0.1	–*	..	0.5	..	0.1	..
Total above [c]	7.6	5.0	..	1.1	..	8.8	..
Memorandum items:							
CETE-5	21.3	9.1	8.6	7.2	6.0	4.8	1.0
SETE-7 [c]	5.2	1.7	2.6	7.0	8.0	1.4	0.7
Russian Federation [e]	-16.0	-6.3	-9.1	-8.7	-8.8	1.8	9.3

Source: UN/ECE secretariat estimates, based on national balance of payments statistics.

[a] Includes errors and omissions; excludes changes in official reserves.

[b] A negative sign indicates a decrease in reserves.

[c] Aggregates exclude Bosnia and Herzegovina and Yugoslavia.

[d] January-March.

[e] Excluding errors and omissions.

(b) Capital flows

Although the international financial climate continued to improve in 2000,[91] there was little change in the volume of capital flows to eastern Europe and the Baltic states (table 1.2.12). In general, current account deficits were easily financed and most countries increased their official reserves. In eastern Europe net FDI rose to $6.8 billion, almost 70 per cent of the total net inflow of funds. Net portfolio investments rose to $2.3 billion (largely external bond issues), and there was a further rise in unrecorded capital inflows (errors and omissions, generally reflecting potentially volatile funds). Unrecorded flows have been a major financing item since 1997, especially in Croatia, Poland and Romania. However, the outflow of short-term funds has accelerated, to over $3 billion in January-June. This has been a widespread phenomenon, also observed, for example, in the Baltic states, Kazakhstan and Russia, and may in at least some cases reflect elements of capital flight. Given the tightness in their external finance positions at various times in 1999, the attraction of new funds has continued to be an important objective in Croatia, Romania, Slovakia and The former Yugoslav Republic of Macedonia.[92]

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[91] Two years after the Asian crisis, private flows to the emerging market economies are still recovering, and the projected volume for 2000 remains considerably below pre-crisis levels. International Institute of Finance (IIF), *Capital Flows to Emerging Market Economies* (Washington, D.C.), 23 September 2000.

The easing of the financing situation of Belarus, the Republic of Moldova and Ukraine in the first half of 2000[93] was due mainly to the inflow of potentially volatile funds: the Republic of Moldova attracted relatively large portfolio investments while in Belarus and Ukraine unrecorded capital and short-term flows dominated. These countries lack access to the financial markets and only Ukraine has an IMF programme (although disbursements have been suspended). In Russia financial outflows accelerated in the first half of 2000, fuelled by the huge current account surplus and a small inflow of FDI. Nonetheless, foreign exchange reserves more than doubled to $21.5 billion in the first nine months of the year.[94] In 2000 a much larger share of the current account surplus has been channelled into official reserves, but capital flight still appears to be substantial.

Despite the improvement in the financial market conditions, the volume of new external bonds issued by the transition economies declined to some $5.2 billion in January-October 2000 (table 1.2.13) as most of the financing needs of creditworthy borrowers were met by FDI and portfolio investment in local securities. Polish entities were the most active borrowers, and the country's sole sovereign bond (€600 million) was launched for benchmarking purposes. A €150 million bond signalled Romania's re-entry into the markets after the financial squeeze in 1999, albeit with a very high risk premium. Margins declined in the ECE region, in parallel with those in other emerging market economies. But there were specific factors as well: political change (Croatia), increased oil revenues (Kazakhstan), and, more generally, improved economic performance at the country level. Increased oil revenues also helped Azerbaijan to acquire its first (sub-investment grade) credit rating. Ten transition economies remain unrated by the major credit rating agencies.

FDI flows into the ECE transition economies have increased steadily during the past decade. Estimates for 2000 as a whole suggest a further increase, in contrast to the situation for the emerging market economies as a whole for which a downturn is projected.[95] In the first half of 2000, the transition economies received somewhat more FDI than in the same period in 1999 (table 1.2.14), due to the record amount attracted by central Europe. Annual flows continue to be heavily influenced by privatization activity, except in Estonia and Hungary where it has largely run its course. Flows in the second half 2000 have been buoyed by major privatization-related investments including the sale of stakes in national telecommunications companies ($4.3 billion in TPSA of Poland and €1 billion in Slovak Telecom), and by bank privatizations in Croatia and Slovakia.

TABLE 1.2.13

International bond issues by the ECE transition economies, 1999-2000

(Million dollars, basis points)

	Bond issues		*Margins*	
	1999	*2000* [a]	*1999*	*2000* [a]
Bulgaria	54	–	..	..
Croatia	541	482	375	210
Czech Republic	814	–	..	..
Estonia	85	200	..	..
Hungary	2 411	890	71	..
Kazakhstan	300	350	825/710	500
Latvia	237	–	330/225	..
Lithuania	470	340	475/395	281/249
Poland	1 146	1 322	..	82
Romania	–	140	..	587
Slovakia	800	1 114	420/385	217
Slovenia	439	385	87	73
Total	7 297	5 226	..	..

Source: UN/ECE secretariat, based on press reports.

Note: Basis points: 1 per cent equals 100 basis points. Margins on fixed rate sovereign bonds denominated in euros (over French OATS or German Bunds), except for Kazakhstan which are dollars.

[a] January-October, preliminary.

(vii) Short-term outlook

During the first half of 2000 the rates of economic growth in the ECE transition economies have been higher than expected at the end of last year. The short-term outlook for these countries now looks very favourable for the remainder of 2000 and through 2001. Countries with rapidly growing high-tech industries such as Hungary, and to a lesser degree the Baltic states and other countries bordering the European Union, should reap the benefits of increasing returns. The south-east European transition economies, however, have not benefited much from growth in the high-tech sectors, but this region can also expect relatively high growth rates, at least in the short run, thanks to the more favourable external environment which should support a strengthening of the recovery. The outlook for most of the CIS countries will largely depend on the situation on the world commodity markets.

Given the prevailing expectations that these favourable conditions will continue, many governments have raised their forecasts for GDP growth in 2000 (table 1.2.1). These revisions are especially pronounced in some of the CIS countries, especially Russia, where in October the official forecast for GDP growth in 2000 as a whole was more than triple that made at the beginning of the year. Substantial upward revisions were also reported in Kazakhstan and Ukraine. As a result of all these revisions, aggregate GDP in the CIS is set to grow by close to 6 per cent in 2000; eastern Europe is expected

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[92] This policy is also reflected in their issue of international bonds.

[93] However, all three countries remain in arrears to Russia.

[94] The end-September figure inclusive of gold is $25 billion, compared to $12.5 billion at the end of 1999.

[95] Direct equity investment in the emerging market economies is projected to fall by some $19 billion in 2000 to $124 billion. IIF, op. cit.

TABLE 1.2.14

Foreign direct investment[a] in the ECE transition economies, 1997-2000

(Million dollars)

				January-June	
	1997	*1998*	*1999*	*1999*	*2000[b]*
***Eastern Europe*[c]**	9 400	14 270	17 361	5 824	7 018
Albania	48	45	41	15	31
Bosnia and Herzegovina	–	100	60*	30*	30[d]
Bulgaria	505	537	806	286	250
Croatia	530	898	1 408	299	582
Czech Republic	1 300	2 720	5 108	1 430	2 052
Hungary	2 173	2 036	1 944	712	910
Poland (cash basis)	3 077	5 129	6 471	2 210	2 737
Romania	1 215	2 031	1 041	673	257
Slovakia	161	508	330	130	130
Slovenia	375	248	181	51	39
The former Yugoslav Republic of Macedonia	16	118	30	20	30*
Yugoslavia	740	..	..	..	..
Baltic states	1 142	1 863	1 139	627	462
Estonia	267	581	305	208	145
Latvia	521	357	348	157	179
Lithuania	355	926	486	262	139
CIS	10 611	6 733	6 599	3 104	2 353
Armenia	52	221	122	60	60[d]
Azerbaijan	1 115	1 024	510	401	85
Belarus	200	149	225	175	47
Georgia	203	265	82	42	41[d]
Kazakhstan	1 321	1 151	1 584	760	620[e]
Kyrgyzstan	83	109	36	4	-2[e]
Republic of Moldova	76	81	34	6	66
Russian Federation	6 639	2 761	3 309	1 393	1 085
Tajikistan	30	24	21	9	9[d]
Turkmenistan	102	64	60*	30*	30[d]
Ukraine	623	743	496	166	252[e]
Uzbekistan	167	140	121	60*	60[d]
Total above[c]	21 153	22 866	25 098	9 555	9 833
Memorandum items:					
CETE-5	7 087	10 641	14 034	4 532	5 868
***SETE-7*[c]**	2 313	3 629	3 326	1 292	1 150
Poland (accrual basis)	4 908	6 365	7 270	..	..

Source: UN/ECE secretariat, based on national balance of payments statistics; IMF for Bosnia and Herzegovina (1996-1998).

[a] Inflows into the reporting countries except for Albania and The former Yugoslav Republic of Macedonia, which are net of domestic investments abroad.

[b] Data for 2000 are preliminary.

[c] Aggregates exclude Bosnia and Herzegovina and Yugoslavia.

[d] Estimate, assumed to be the same as in 1999.

[e] Estimate, twice first quarter value.

to average 4.2 per cent and the GDP growth in the Baltic states should settle down to 3.6 per cent. All in all this suggests an average annual rate of growth for the ECE transition economies as a whole of over 5 per cent, by far the highest rate since the transition process got underway 10 years ago.

The rate of growth of world output is expected to decelerate in 2001, but growth is forecast to remain relatively strong in western Europe and this should sustain the demand for imports from eastern Europe. Commodity exporters are also expected to continue to benefit from strong global demand and relatively high world market prices. Most official forecasts for GDP growth in the transition economies in 2001 reflect this optimism. Moreover, while actual performance in the transition economies has often diverged considerably, the forecasts for 2001 are more homogeneous across countries and subregions (table 1.2.1): average growth rates in eastern Europe, the Baltic states and the CIS are all expected to be slightly above 4 per cent.

In eastern Europe, the 2001 budgets have generally been drafted on the assumption that the current high rates of output growth will be sustained. Some of the countries that in recent years have experienced economic downturns (Bulgaria, Croatia, the Czech Republic) or a deceleration of growth (Slovakia, The former Yugoslav Republic of Macedonia), are expecting an acceleration of GDP growth in 2001. The improvement of the external environment is behind expectations of a continuation of the recovery in the three Baltic countries in 2001: in Estonia and Latvia rates of growth are expected to remain comparable to those in 2000 while in Lithuania the authorities anticipate an end to the period of sluggish growth.

Although the unusually high rate of output growth in Russia in 2000 is unlikely to be sustained for a second year, the authorities are still expecting GDP growth of 4 per cent in 2001. For the rest of the CIS, most of the available official forecasts for GDP growth in 2001 are in the range of 4-6 per cent. It should be borne in mind, however, that the economic prospects of these countries remain highly sensitive to external shocks and movements in world commodity prices. In addition, for some of them there still exists a threat of energy shortages due to supply constraints and high levels of external indebtedness (mostly to Russia), while access to additional external financing remains uncertain. Furthermore, the severe drought which hit agricultural output in some of these countries in 2000, will probably continue to have negative effects on the food processing industries and, eventually, exports.

Since the recent resurgence of inflation in some transition economies was mainly imported from abroad, the prospects for inflation will also depend to some extent on what happens to world commodity prices. So far, high rates of export-led productivity growth have helped to alleviate these inflationary pressures: industrial unit labour costs have declined in most of the east European economies as increases in nominal wages have so far lagged behind the growth in labour productivity. In contrast, relatively slower productivity growth coupled with an accelerated rise in wages has resulted in rising unit labour costs in all the CIS countries. In some of them producer price inflation has been almost double the rate of increase in consumer prices, putting further pressure on consumer prices and wages to rise even further.[96]

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[96] Rising real wages can have two different effects on the short-term outlook of eastern Europe: on the one hand they can increase consumer demand and hence domestic output but, on the other, they can eventually increase inflationary expectations. Continued productivity growth and a favourable global economic environment would favour the first scenario. Rising commodity prices would favour the second and would likely result in a moderation of growth in 2001 if the central banks decide to respond by tightening monetary policy.

Despite the good prospects for growth, the immediate outlook for the labour markets in central and eastern Europe is not so favourable since most businesses are initially absorbing the current widespread underutilization of labour. Moreover, as the process of enterprise restructuring is still underway in many transition economies, continued labour shedding can be expected to further aggravate the problems of unemployment and weak employment growth.

The balance of payments does not appear to be a constraint on growth in most ECE transition economies. Significant improvements have occurred in the oil-exporting CIS countries, but even in the oil-importing countries, exports have been growing strongly, current account balances have improved and there has been an increase in FDI in the region. Current forecasts suggest little change in current account balances although this scenario depends on the continued buoyancy of west European economic growth and a stabilization of oil prices. Conditions in the financial markets are generally favourable, and most countries hope to maintain (if not increase) current levels of FDI. However, the anticipated fall in privatization revenues in some transition economies (such as Poland) will require a shift to alternative sources of finance.

PART TWO

FROM PLAN TO MARKET: THE TRANSITION PROCESS AFTER 10 YEARS

PAPERS FROM THE ECE SPRING SEMINAR, MAY 2000

INTRODUCTION AND SUMMARY OF DISCUSSION

Economic Analysis Division, UN/ECE

The UN/ECE's third Spring Seminar was held in Geneva on 2 May 2000 and, as in previous years, brought together a large number of economists, policy advisers and policy makers from universities, research institutes, government ministries and central banks, as well as some representatives of the private enterprise sector. The topic chosen for the Seminar by the member governments of the Commission was a review of 10 years of the transition process in central and eastern Europe and the countries formerly part of the Soviet Union. This is obviously a huge topic for a one-day seminar: there are 27 member countries of the UN/ECE with economies in transition and they differ considerably both with respect to the conditions and problems that were facing them at the start of the process and to the actual progress that has been made in establishing viable and efficient market economies. For all of them, the problems have proved to be more numerous and complex than envisaged by most commentators and policy makers in the immediate aftermath of the fall of the Berlin Wall, and for the majority the creation of market economies and of the foundations for sustained growth has been much slower than expected. Economists and other social scientists have not been slow to publish their analyses of the process, and their advice on how to advance it, with the result that there is already a considerable literature on the economics of transition, or "transformatology" as Professor Berend has tagged it.

The 2000 Spring Seminar approached this complexity by selecting a small sample of themes referring to what might be called different levels of "aggregation" of the transition process. The first focuses on the process as one of systemic or regime change and places it in an historical and societal context which goes beyond the narrower categories of mainstream economic analysis. In fact one of the questions arising here is whether the prevailing economy theory in 1990 was really capable of fully comprehending the nature and requirements of such radical systemic change. At the next level the attention moves to macroeconomic policy and the extent to which countries have succeeded in creating a stable framework for instigating and sustaining high rates of fixed investment and economic growth. The third theme is about the changing structure of the transition economies, both in the sense of how the product composition of output and exports have changed since 1989 and of how behavioural relationships have altered in response to the new patterns of relative prices, property rights, and to the structure of incentives in general. Finally, the focus turns to the impact of these radical changes in economic and political organization on individuals and various subgroups of the population. The promise of systemic change is increased welfare and higher living standards for all, but distributional outcomes are rarely equal: there are winners and losers, and the latter are often those who bear a disproportionate share of the costs of economic adjustment. The focus on social costs and the consequences of economic change reflect not only issues of morality and social justice but also concern to generate and preserve popular support (and thus legitimacy) for the new configuration of democratic institutions and market economies.[97]

In the opening paper ***Professor Ivan Berend***, of UCLA California and the Hungarian Academy of Sciences, places the attempts to create market economies in eastern Europe in a broad historical context. He argues that the region's attempts to catch up with the levels of development in western Europe have a long and unsuccessful history: efforts to integrate with the western economies in the second half of the nineteenth century were based on laissez-faire and free trade but they had limited success and were replaced by protectionism and extensive state interventionism after the First World War. State socialism and central planning after the Second World War intensified the economic nationalism of the interwar years but despite some transitory success in the 1950s and 1960s these economies were still unable to compete on world markets and lacked the institutional and other capacities required to sustain the process of catching up with the west. Between 1870 and 1989, the economic position of central and eastern Europe relative to western Europe was virtually unchanged.

From this perspective, Berend criticizes what he sees as a widespread assumption of policy makers and policies in the early 1990s that a change of economic regime and the adoption of laissez-faire policies would automatically trigger a release of entrepreneurial energies on a scale sufficient to lead to economic growth and, eventually, levels of prosperity matching those in the west.[98] Sustained growth and catching up does not "automatically follow when a country adopts the western market model". Berend's analysis also leads him to a different interpretation of the post-1989 "transformational recession" whose length and depth was not foreseen by most analysts and policy makers in the early 1990s.[99] Some, such as János Kornai, see it as an unavoidable and necessary component of the change in regime, in relative prices and so on, while others have argued that its severity was to a significant extent due to neglect of the "institutional hiatus"[100] created by the rapid collapse of the old system and its slow replacement by the new institutional framework. Berend however sees the "transformational recession" as an outcome of the chronic economic problems of the area and, in particular, as an extension of the economic crisis in which the centrally planned economies had been mired since the oil shocks of the 1970s. More generally he sees most of the transition economies as caught in a chronic structural crisis, a crisis of the European periphery, in which their capacity to adjust to a developing world economy is limited or non-existent.

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[97] For an early stress on the importance of these issues see, UN/ECE, "Popular support for the transition process", *Economic Survey of Europe in 1992-1993*, pp. 10-15.

[98] For a similar line of argument see UN/ECE, "Economic reform in the east: a framework for western support", *Economic Survey of Europe in 1989-1990*, pp. 5-26.

How should policy makers respond to this pessimistic diagnosis? Berend stresses the importance of an effective state in the process of creating an effective market economy and achieving integration with western Europe. At least for a time, "a mixed economy with a restructured and efficient state-owned sector" is the appropriate target combined with a state capable of introducing appropriate regulation, setting out the "rules of game" and generally creating a national environment which will prove attractive to foreign direct investment (FDI). In common with other countries on the European periphery, the transition economies of central and eastern Europe have never been more than minor centres of technological innovation and they are therefore dependent on adopting foreign technology to achieve their development goals. Thus, for Berend, FDI is the key to breaking out of the structural crisis in which central and eastern Europe has been stuck for decades. Here he joins company with the "mainstream" policy advice of the 1990s which also attached strategic importance to FDI in achieving the transition, but the crucial difference is that he does not believe that the other components of the "mainstream" package were conducive to creating the necessary environment for attracting foreign investors.

Professor Berend's paper provoked a lively discussion in which there were large measures both of agreement and disagreement over his principal theses. Some of the critics felt that he was suggesting a degree of historical and geographical determinism which underestimated the possibilities for growth and the importance of policy in creating the conditions for take-off. Both ***Erik Berglöf*** and ***Jan Svejnar*** emphasized that "policy matters", but Berglöf agreed to a large extent with Berend on the important role of the state in creating the institutional, regulatory and enforcement conditions for growth, in taking care of distributional issues, and in building a constituency for sustaining the reforms. Svejnar accepted the desirability of an "efficient state sector implementing effective regulation and policies" but he was sceptical that this was feasible in the early 1990s: the available staff in the former planning ministries did not have the relevant skills and in sectors where the state was still an owner and regulator performance was poor.

Berglöf and Svejnar also thought that Berend had not stressed sufficiently the considerable intercountry variations in performance among the transition economies. Svejnar, in particular, thought these variations were due more to policies than to "deterministic, long-term phenomena", but, as ***Paul Welfens*** points out, this still leaves open the question as to whether we really understand why some countries are able to push ahead with successful policies and others not. Perhaps Erik Berglöf gets closer to the nub of the issue in his remark that "optimal policies cannot be thought of independently of how they can be implemented and sustained". If good institutions are necessary for the implementation of optimal transition policies, then much of the argument over whether institutions *or* policies matter is more largely redundant. Nevertheless, this discussion suggests the need for much more careful research into why a few transition economies have been able to forge ahead while many more have suffered major failures in their efforts at transformation.

The other area which appears to require a lot more research is FDI. This might seem surprising given that a huge literature on the subject exists, but as Berend, Berglöf and Welfens emphasize, FDI varies a lot in its effectiveness: it is not always beneficial, and the spillovers to the rest of the domestic economy vary considerably both in size and sign. Although the benefits of FDI are often taken as axiomatic, the matter is essentially an empirical one and so more detailed research into the conditions in which it is beneficial could be especially helpful to policy makers.

Paul Welfens largely agreed with Berend's analysis and his interesting extensions to the paper are not summarized here. But *à propos* of the question raised in the opening paragraphs above, namely, whether the mainstream economics of 1990 was really up to the task of analysing systemic change in eastern Europe, he stresses two points: one, that the economic transformation was accompanied by a radical change in political arrangements and that modern economics has a poor tradition of analysing the interdependence of economic and political change; and, two, that the standard neo-classical economics is essentially concerned with the analysis of marginal change, while the transition is essentially about very many large, discrete changes. On both counts, mainstream (neo-classical) economic analysis appears to be an inadequate instrument for analysing the transition process.

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[99] One of the participants queried whether the transformational recession was really as steep as was suggested since the data for 1989 and earlier were of dubious value. Professor Berend said that he based his statements on calculations and adjustments made by Angus Maddison and Professor Paul Bairoch: although there was always a margin of error he was confident that they were reasonably comparable with the figures for later years.

[100] R. Kozul-Wright and P. Rayment, "The institutional hiatus in economies in transition and its policy consequences", *Cambridge Journal of Economics*, Vol. 21, No. 5, September 1997, pp. 641-661.

Professor Berend replying to the discussion, emphasized that he was not making deterministic forecasts for eastern Europe but he did insist that history was very important for understanding current problems – "you cannot understand the 1990s from the 1990s". Nor was he suggesting a geographic determinism – the examples of Sweden between 1870 and 1914 and the more recent cases of Ireland and Spain demonstrated that countries on the periphery could very well catch up with the west European core – but he was arguing that this was only likely to occur under certain international conditions, and especially those which favoured international investment.

Professor Stanislaw Gomulka, of the London School of Economics and Adviser to the Minister of Finance of Poland, looks back over the 1990s to present a stocktaking of macroeconomic policies during the transition process and draws some lessons that might be relevant to those countries which are still striving for macroeconomic stability. Gomulka's analysis recognizes many of the factors stressed by Ivan Berend: the importance of initial conditions, particularly the accumulation of structural problems in large state owned enterprises which were so complex as to be virtually incapable of being restructured without large-scale foreign investment; the crucial importance of the need to create the institutional and legal conditions to encourage the growth of a new private sector and stimulate the recovery of output; and the need to attract foreign investment in significant quantities to boost technology transfer as a key element in a catch-up strategy.[101]

Gomulka, however, argues that for central Europe and the countries of the former Soviet Union there was little choice but to adopt a strategy of rapid adjustment. (Shock therapy he sees as only being applied in the former German Democratic Republic and gradualism only in China.) Within the group of rapid adjusters he distinguishes a "strong variant", which was applied in the Baltic states, Croatia, the Czech Republic, Hungary, Poland, Slovakia and Slovenia, and a "weak variant" in all the others including Russia. In the group of strong variant adjusters, prices and international trade were quickly liberalized, and the conditions created for the growth of the new private sector; hard budget constraints were imposed on enterprises; and a fair degree of macroeconomic stabilization was achieved fairly quickly. In the weak variant of rapid adjustment, typified by the Russian experience, privatization was introduced early and rapidly, but it was done before the full liberalization of prices and trade, before the imposition of hard budget constraints on enterprises, and before significant progress had been made with macroeconomic stabilization. But Gomulka also observes that central Europe and the Baltic states benefited from "pre-existing rules and institutions (workers' councils, a commercial code, a legal system)" and that elsewhere institutional deficiencies were severe and made policy-making extremely difficult. Thus, echoing Erik Berglöf's point above, policy effectiveness depends on effective institutions, and where institutional deficiencies are considerable, macroeconomic management will be all the more difficult. Initial conditions, including of course the institutional legacy of the previous regime, may therefore explain most of the intercountry variations in economic performance in the 1990s. Indeed, one of the key lessons Gomulka draws from the 10-year history of the transition process is that success "depends above all on the rapid creation of conditions – institutional, legal, microeconomic and macroeconomic – which are conducive to the development and growth of a new private sector...".

How should this development be encouraged? Whereas Berend argues for state intervention and a mixed economy, Gomulka sticks to a fairly orthodox agenda: price liberalization, hard budget constraints and reduction of entry barriers to stimulate a new, competitive private sector; a tight fiscal policy, preferably in conjunction with an independent monetary authority, as an essential component of a disinflationary strategy, and also aiming to meet the Maastricht criteria for budget deficits and public debt; an exchange rate sufficiently flexible to stimulate the competitiveness of the new private sector, discourage speculative inflows of foreign capital, and generally maintain external credibility; and labour markets made more flexible "e.g. by reducing hiring and firing costs". Gomulka puts considerable emphasis on the links between the various elements of a coherent macroeconomic policy and the growth of the new private sector, which he sees as the essential microeconomic foundation for sustaining both macroeconomic stability and economic growth. In the same vein, he sees a significant role for the public sector in promoting investment in infrastructure, research, education and other areas where there are positive externalities for the private sector. Increased public expenditure in these items should be offset by reductions in spending on social transfers, defence and subsidies.

George Kopits (Assistant Director of the Fiscal Policy Department of the International Monetary Fund) agreed that the effectiveness of macroeconomic policy, especially in the early stages of transition, depended on the presence of effectual transmission mechanisms which in turn depend on the development of the appropriate institutions. In their absence governments had to improvise with alternative policy tools such as quantitative credit limits, taxes on wages increases, etc. Kopits stresses how much progress has been made by the advanced transition economies in developing effective institutions and macroeconomic policy tools, but **Sylvana Malle** (Director of the Non-member Economies Division, OECD) points out that Gomulka's paper fails to assess the extent to which the central European and Baltic economies are capable of facing the pressures that will arise from fuller integration into a global economy. A few may be able to do so, but she felt that most were still relatively vulnerable to a combination of external shocks and domestic structural weakness.

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[101] Both Berglöf and Gomulka agree that for the candidate countries the prospect of EU membership should also enhance the former's policy credibility and thus, by reducing the risk premia to both domestic and foreign investors, should boost investment and growth.

Kopits also raised the perennial topic of shock therapy versus gradualism: he agrees with Gomulka that the former German Democratic Republic was an extreme case of shock therapy, but argues that there were important elements of shock in the other central European economies, especially in their tradeables sectors, which were subject to rapid trade and price liberalization.[102] This is perhaps a warning of the dangers of dualistic categorization, a tendency which has been quite common in the analysis of the transition process – shock therapy versus gradualism, institutions or policies, etc. The categories are rarely homogeneous and they may well be in symbiosis rather than opposition. **Professor Joze Mencinger** (Ekonomski Institut Pravne Fakultete, Ljubljana) in his comments, is especially critical of such categorization, not least because many transition economies have not really followed any consistent model at all.

Kopits agrees with Gomulka that stabilization and growth are mutually re-enforcing, largely by lowering risk premia, and Malle agrees with Gomulka's emphasis on the new private sector in creating the conditions for sustainable growth. However, she queries whether we understand enough about the factors behind the development of this sector – why does its growth vary so widely among the transition economies and why, after a decade, is the density of small- and medium-sized enterprises, even in the advanced transition economies, so much lower than in western Europe? Liberalization is necessary, but it may not be sufficient – and how it is done, privatization for example, also matters. Initial conditions (including the record of reform efforts before 1989) also seem to matter and experience suggests that a critical mass of reforms needs to have been undertaken before the new private sector can take off. Malle also makes the point, which is not always made by those who accept the importance of initial conditions, that the fundamental question is not "whether the government should stabilize, consolidate the budget and create a good institutional environment for business" but how this can be done in countries in very different conditions and from very different starting points. In other words, contingency and context matter, and this is obviously important for the many economies in the CIS and in south-east Europe where general policy packages have not proved very successful.

Joze Mencinger sees the rapidity with which the transition process was initiated as a major mistake, and on this he sides with Professor Stiglitz's critique. Sylvana Malle's point, that national context and initial conditions must be taken into account, was ignored in the formulation of policy, which was influenced more by *assumptions* about actual conditions and by ideology in setting immediate objectives. Mencinger stresses the importance of the informal interactions between civil society and economic and political institutions and the gradual development of the norms and patterns of social behaviour on which the efficient operation of market institutions ultimately depends. He argues that the initial macroeconomic policy prescriptions for the transition economies were based on the false assumption that aggregate demand exceeded supply: stabilization through restrictive monetary and fiscal policies, wage restraint, anchoring of the exchange rate, and rapid liberalization, actually deepened the transformational recession. Mencinger suggests that in assessing the sustainability of growth in central Europe much greater attention should be paid to growth in relation to the current and capital accounts, i.e. the growth rate which can be achieved without depending on foreigners for capital or asset sales, rather than the more common criteria of inflation, interest rates, liberalization of capital flows, etc. Only Slovenia appears to be meeting this criterion and, after discussing developments there, Mencinger concludes that "gradualism, pragmatism and risk aversion in the wake of the devastation of the old system have created the proper mix for a rather successful transition in Slovenia" – a provocative conclusion for policy makers in countries lagging behind in the transition process.

Leonid Grigoriev (Bureau of Economic Analysis, Moscow) agreed with much of what both Berend and Gomulka had said about institution building and the necessary conditions for economic growth to take off; he emphasized the importance of initial conditions and highlighted the dilemma facing policy makers, namely that reforms cannot wait for the slow pace of institution building, but without effective institutions the reforms will not be sustained. Grigoriev argues that there is no single solution to the problem of simultaneously creating institutions and achieving macroeconomic stability and growth, and insists that, in privatization for example, there is a trade-off between speed and the quality of the results. He would thus appear to side with Mencinger in stressing the need for pragmatism and gradualism.

Among the initial conditions faced by all the transition economies in the early 1990s was a heavily distorted industrial structure, which reflected the preferences of planners rather than comparative advantages as revealed in competitive markets. The central planners had often shown a strong bias towards heavy, energy-intensive industries and energy, transport and other intermediate costs were kept artificially low. Once prices and trade were liberalized much of the capital stock of these industries was no longer economically viable at the new structure of relative prices: they either had to close down or to seek subsidies in one form or another from the government (which the latter was willing to provide in many cases when it feared the social consequences of mass lay-offs). In a few cases, restructuring was possible with the help of foreign investors but, as Professor Gomulka remarked, the scope for this was limited. This restructuring – the collision of the old central planning structure with market-determined relative prices – is often referred to as "passive restructuring". In contrast, the emergence of the new private sector, emphasized by Gomulka, should lead to new investments determined by market signals and thus to a changing product or industrial distribution of total output and employment.

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[102] This issue was also raised in the general discussion, with participants from the floor pointing out that the policies introduced in Poland in 1991 were widely regarded as shock therapy. But Gomulka replied that this was not really the case as policies were softened soon after their introduction: disinflation to a monthly 1 per cent inflation rate was originally supposed to have been achieved in one year, but in fact it took 10; the fiscal targets were not met either, with some expenditures, such as pensions, rising much faster than planned and leading to a larger budget deficit.

In his paper ***Professor Michael Landesmann*** (University of Linz and the Vienna Institute for International Economic Studies) examines the evidence for structural change using the detailed statistics in the Vienna Institute's industrial database. His focus is on a relatively small group of transition economies from central and south-east Europe and a key element in his approach is to examine whether the industrial structures of these countries are converging on that of the European Union. At a high level of aggregation there has been a general tendency for a relative decline in agriculture (except for a temporary recovery in Bulgaria and Romania) and an expansion of the services sector. There was also large-scale deindustrialization in the first three to four years of the transition, but from the mid- to late 1990s the leading transition economies appear to have embarked on a process of reindustrialization.[103] Landesmann is careful to stress the considerable diversity of experience among the transition economies in his sample: this applies to the extent to which productivity growth is due to output growth or employment reduction, to whether exports or domestic demand are the principal motors of growth, and to the degree that wage growth lags behind or exceeds productivity growth. Perhaps his major finding is that the more successful economies appear to have been gaining competitiveness in the medium- and high-tech industries and moving away from the low-wage, (unskilled-) labour-intensive activities. The effects of this can be seen in the structure of these countries' exports to the European Union. At the start of the transition in 1989-1990 this structure was similar to that of a developing country trading with the EU, i.e. it was dominated by unskilled labour-intensive and resource-intensive products. But in 10 years this structure has changed considerably – specialization has increased significantly in R&D, skill and capital-intensive activities, while dependence on unskilled labour-intensive products has greatly diminished. This is particularly the case for Hungary, but it is also true for the Czech Republic and Slovenia, with Poland somewhat further behind. This structural adjustment is also reflected in the "quality" of these countries' exports to the EU, as measured by their unit values. In 1989-1990 their products tended to be of very low quality but there has since been a rapid improvement over the past decade. However, the two countries of south-east Europe in Landesmann's sample, Bulgaria and Romania, have shown very little change in this direction: their output and export structures remain dominated by low value, labour-intensive products – a profile more typical of developing countries.

Landesmann relates these shifts in structure towards the medium- and high-tech sectors to FDI: this is concentrated in the leading transition economies and it has gone, not into the low-wage, labour-intensive branches but into the skill-, capital- and export-intensive sectors of industry. Whether this FDI is generating positive spillovers to domestic enterprises or creating dual-structure economies is not clear and is an important question for future research. Landesmann also recognizes the need for a deeper analysis of the interaction between institutional and behavioural changes, and between political, economic and cultural developments – and he shares this concern with Professors Berend and Gomulka.

Commenting on Landesmann's paper, ***Professor Paul Hare*** (Heriot-Watt University, Edinburgh) pointed out that judging a country to be "advanced" or "backward" in the process of structural change referred in practice to its progress in moving toward a structure judged to be typical or in some sense a valid objective for the economy in transition. But such an approach "requires a degree of caution and humility". Not only may there be perfectly good reasons as to why a country is unable to move any faster in overcoming the effects of the previous regime, but the "structural norm" may not even be valid for it. It would be surprising, for example, if the relevant equilibrium prices for the central Asian republics were to yield the same equilibrium structures as in central Europe. Thus, although Landesmann's paper is useful in describing what has been happening in some of the candidate countries for EU membership, it offers little policy guidance for those unlikely to join in the near future, if at all.

Andras Nagy (Professor at the Institute of Economics, Budapest), thought that Landesmann's paper could have explored more the relationship between institutional change and structural development, and he suggested, following Mancur Olson, that differences in the latter were partly due to the emergence of special interest groups and the persistence of pre-transition mentalities. Landesmann, however, thought it was impossible to quantify the impact of institutional change on economic outcomes, but in any case he said his paper had argued that the relatively strong differentiation among countries with respect to the speed and direction of structural change was shaped by FDI, domestic factor endowments, proximity to and prospects for membership of the EU. For Nagy, the main message of Landesmann's analysis was that rapid changes in many of the transition economies was underway and these were positively associated with significant improvements in economic performance.

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[103] On this, see also UN/ECE, *Economic Survey of Europe, 1998 No. 1*, chap. 3.3(i).

Since all economic change involves adjustment costs it is important to ask how great are the costs, who bears them, and whether mechanisms are in place to ensure that the winners can compensate the losers. ***Professor Michael Ellman*** (University of Amsterdam), considers these questions in the final paper of the Seminar. Drawing on a wide range of data sources, some of them unavoidably problematic, he shows that the adverse social consequences of the change in economic and political systems have been considerable for large numbers of the population living in the transition economies. (However, he judges them to be generally less severe than those resulting from earlier changes in the system such as the collapse of the Russian Empire and the transition to socialism in 1917-1922, the forced incorporation of the Baltic states into the Soviet Empire in the 1940s, and the transition to socialism in eastern Europe in 1945-1949.) The social costs have many dimensions. There has been a substantial increase in poverty, especially in Romania, Russia and Ukraine, and this in turn has led to significant increases in malnutrition, particularly among children. A more widespread effect of the transformation recession has been large falls in employment, with a disproportionate loss of jobs among women, and substantial increases in unemployment although this has varied considerably between countries. Inequality of incomes has increased throughout the transition economies except Slovakia, but in general the distribution is still relatively more equal than in the OECD countries.

One important feature of the transition in many countries is the deterioration or curtailment of many public services, a development which has particularly affected the poor and those most affected by the negative effects of the transition process. Ellman underlines especially the impact on children. Educational inequality has increased and in several countries the proportion of children receiving education has fallen significantly. This combination of effects has also led to an increase in a number of socio-economic problems such as corruption, crime, alcoholism and drug addiction.

Ellman is careful to point out that the data are not always reliable, that not all the social pathologies are due to the transition process, and that there are considerable differences among the transition economies with some already comparable to the EU in respect of health standards and the prevalence of corruption. Also, the transformation has brought many social benefits, ranging from easier access to modern contraception to a reduction in national oppression. Nevertheless, "the majority of the population of the region lives in the relatively unsuccessful countries" where the costs are more prominent.

These various costs have fallen more heavily on some groups than on others. Ellman identifies the following as being among the worst affected: workers in industry and the public sector; the rural population; women and children; refugees and displaced persons; the Roma; Russians in the non-Russian CIS; and savers. Discussing Ellman's paper, ***Alexandru Athanasiu*** (Professor at the University of Bucharest; Minister of Labour, 1997-1999; and Prime Minister ad interim, December 1999), and ***Martina Lubyova*** (Institute for Forecasting, Bratislava), both added pensioners to the list of major losers from the transition process. ***Alena Nesporova*** (Senior Specialist in the Employment Strategy Department of the ILO, Geneva) stressed that neither employment nor social policies had been effective in mitigating the social costs of the transition shock, mainly because of tax collection and budget problems but also because of poor targeting of social policies and a lack of active employment promotion measures.

Ellman closes his paper by asking why such serious social costs have not led to widespread popular protests and upheaval. Apart from Albania in 1997, they have been remarkably absent. He draws on other work to suggest that the informal economy and emigration have served as safety valves ("exit" rather than "voice"). Also, as already mentioned, the transformation has brought many benefits, not least the greater freedom for self-employment and individual initiative in all walks of life, which may weaken the impulse for political protest. Still, as Nesporova points out, the main winners from the transition are those who are competitive in terms of education, especially the young and active, and those with privileged access to power. The lack of protest by the mass of losers is therefore still a puzzle. Perhaps an important factor here, in addition to a broken tradition of collective protest in many countries, is the weakness of civil society in large parts of the region. Collective political protest requires extensive social networks and coordinating mechanisms – political parties, trade unions, etc. – to be effective. But these are also among the missing or weak institutions of the new politico-economic system. Political leaders, however, might be unwise to ignore the warnings of those who fear a backlash against the social costs of the transition process. To some extent this is perhaps already evident in a number of countries where governments are finding it extremely difficult to build effective coalitions for reform. But one of the key lessons from past experience is that the limits of any given population's tolerance for hardship, real or imagined, is extremely difficult to forecast. The political and economic failures of the communist regimes of eastern Europe had been evident for many years and Professor Berend identified the source of the latest crisis in the mid-1970s – but when the collapse came it took everyone by surprise, politicians, economists, political experts and "Sovietologists" alike.

CHAPTER 2

FROM REGIME CHANGE TO SUSTAINED GROWTH IN CENTRAL AND EASTERN EUROPE

Ivan T. Berend

2.1 Transformational crisis versus peripheral structural crisis

In criticizing the use of the laissez-faire concept in interpreting central and east European transformation, I would suggest that the process does not end with systemic change. Laissez-faire interpretations maintain that economic growth, prosperity and catching up are automatic outcomes of marketization. The reality is different. Systemic change, in the sense of economic transformation, would be senseless without creating the potential to respond to the challenge of the technological-structural revolution of the age. Successful restructuring cannot be the mere result of marketization and privatization. It cannot happen without the massive participation of transnational companies. Their investment, however, is not guaranteed and might be a mixed blessing. Appropriate international and national environments are required to generate a spin-off effect and avoid the rise of a dual economy with advanced foreign enclaves in an environment of continued peripheral backwardness. The first decade of transformation clearly reflects two, rather different possible outcomes of transformation and different responses to technological-structural challenges in the diverse areas of central and eastern Europe.

State socialism collapsed in central and eastern Europe a decade ago. In most cases the change of the regime was quite peaceful since the Soviet Union gave up control of the area, and the communist *elite* lost its self-confidence and hope to be able to solve the towering economic problems. In the decisive Polish and Hungarian cases significant opposition emerged from without and/or within the ruling party either to attack the regime or to reform it radically. A stormy and spectacular transformation began and characterized the entire period of the 1990s.

From the very beginning, a vast literature on transformation came into being. Advisers of newly appointed governments, scholars, and experts of various international institutions worked out hundreds and thousands of studies, recommendations and critical analyses alike. A broadly accepted set of criteria for a reform programme, the so-called Washington consensus of 1989, originally applied to less developed, crisis-ridden Latin American countries, was offered as a blueprint for the process of central and east European economic transformation.[104] This prescription was offered for former state socialist countries by the international financial institutions, the International Monetary Fund and the World Bank, and by the American administration. Its central elements were macroeconomic stabilization, especially in those countries with significant inflation and indebtedness; the building of new institutions and the introduction of legislation necessary for a market economy; price and trade liberalization; and large-scale privatization of the previously nearly complete state owned and operated economy.

Most of the "transformatology" literature, covering the above-mentioned topics, is based on the explicit or implicit assumption that the elimination of deformed non-market economies, the restoration of the market and private ownership, paired with a laissez-faire free market system would automatically solve all of the major economic and even social problems of the transforming countries. The transition from plan to market is, thus, the key to the door of prosperity and to catching up with the west. "The economic reforms", stated Jeffrey Sachs in 1991, "will set in motion a sustained process of economic restructuring.... Once market forces are unleashed, there should be a strong pull of resources into the previously neglected [service] sectors.... Agriculture is another area where we should expect major restructuring.... The third major trend that we should expect is a complete restructuring within the industrial sector, from energy-intensive heavy industry to more labour-intensive and skill-intensive industries that can compete on the world market.... Western firms ... are likely to set up operations ... for the sake of export production, in the same way as European firms are investing in Spain...".[105]

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[104] J. Williamson, "The Washington consensus revisited", in L. Emmerij (ed.), *Economic and Social Development into the XXI Century* (Inter-American Development Bank, Washington, D.C., 1997).

[105] J. Sachs, "The economic transformation of eastern Europe: the case of Poland", in K. Poznanski (ed.), *Stabilization and Privatization in Poland: An Economic Evaluation of the Shock Therapy Program* (Boston, Kluwer Academic Publishers, 1993), pp. 208-209.

This assumption was in the spirit of the age. The competition of advisers and new governments in radicalism and the attempt to make a *tabula rasa*, to unleash an almighty market automatism, was partly the consequence of a lack of experience in travelling an unbeaten road, but most of all, of the *Zeitgeist* of the 1980s and 1990s, dominated by a Chicago school version of laissez-faire ideology, or, as George Soros named it, market fundamentalism, which "disregards social values" and "seeks … to impose the supremacy of market values…".[106] "Reaganomics" was presented as an overall, quick solution to economic ills, while Thatcherism successfully undermined the concept of social partnership. These ideals, advocated by the great powers, the international financial institutions, and hundreds of experts and advisers, penetrated central and eastern Europe and the entire world. No doubt, if accepted, they served propaganda and public relation goals well, received headlines and tremendous applause in the west. Provided that this programme for introducing a market economy represented the only successful road towards an automatic economic restructuring and the generation of prosperity, it was logical to urge fast and radical market reforms. The speed is important if you have to go through the "valley of tears". The faster one concludes transformation, maintained the advocates of this concept, the better it is, because the pain of transformation will disappear and one can reach the other end of the valley of tears earlier. As Michael Mandelbaum of the Council on Foreign Relations most characteristically phrased it, "If the people … can endure the hardship that the policies of stabilization, liberalization and institution building inflict, they will emerge at the other end of the valley of tears, into the sunlight of western freedom and prosperity".[107]

Thinking in the framework of the laissez-faire paradigm, the dramatic decline in output and GDP during the early 1990s was not as bad as the people of the region thought, because things first had get worse before they got better. The dramatic economic crisis is nothing else, as János Kornai interpreted it, than a "painful side effect of the healthy process of changing the system", a "transformational recession" caused by a transitory "shift from the sellers' to a buyers' market; contraction of investment; a shift in the composition of foreign trade; disruption of coordination, enforcement of financial discipline". The appropriate cure of the malaise is to "accomplish the task [of market reforms] faster".[108] Jeffrey Sachs similarly warned in 1991: "The time in the valley [of tears] depends on the consistency and boldness of the reforms. If there is wavering or inconsistency in economic measures, it is easy to get lost in the valley. Argentina has been lost for forty-five years".[109] He, as well as many others, advocated "comprehensiveness and speed in introducing the reforms" which "can and should be introduced quickly, in three to five years".[110] He also maintained that "macroeconomic stabilization can also be achieved relatively quickly". However, he added, restructuring that follows reform will take "presumably a decade or more".[111]

In sum, if you marketize and privatize fast, not only will systemic change and marketization be concluded in a decade or so, but also restructuring will automatically follow and generate prosperity. This concept implicitly suggests that east European backwardness is a mere consequence of the planned economy and state socialism. If this was the case, indeed, it would be enough "to return to normalcy" by introducing the western type of market economy by bold and radical reforms.

In reality, the backwardness of the area and the failed attempt to catch up with the west has a long history. During the second half of the nineteenth century most of the area adopted the *Zeitgeist* of laissez-faire, free trade and export-led industrialization, and joined the international European economy. That attempt, however, failed, or, at least met with only limited success: central and eastern Europe remained agricultural, rural, and traditional, compared with the industrialized and urbanized west.[112] After the First World War, in a radical departure from the past, the countries of the region turned to economic nationalism, introduced high protective tariffs, strong state interventionism, various kinds of planning, and replaced export-led policies with import substitution. The result, nevertheless, was the same semi-failure and continued backwardness.[113] The planned economy of state socialism, in this respect, was only a new, bitter, and extremist version of economic nationalism or, perhaps more accurately, a modernization dictatorship. State interventionism and autarchy served to avoid hopeless competition, and accelerate economic growth in a protected market. Behind the shield of an oppressive state, forced state capital accumulation served massive investments and rapid growth. The effort, however, again ended in failure. In other words, central and eastern Europe, is not in a position to simply reject the unpleasant and unsuccessful intermezzo of the last half a century and "return to normalcy". Rebuilding a private-market economy with all of its institutions and legal prerequisites, i.e. systemic change itself, cannot simply produce a mechanism of successful sustained growth, leading to a catching up with western Europe. This mechanism has never worked in this area. A brief comparison can illuminate the *longue durée* of economic trends in the region.

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[106] G. Soros, *The Crisis of Global Capitalism* (New York, Public Affairs, 1998), pp. XVII-XVIII, 196.

[107] M. Mandelbaum, "Introduction", in S. Islam and M. Mandelbaum (eds.), *Making Markets. Economic Transformation in Eastern Europe and the Post-Soviet States* (New York, Council on Foreign Relation Press, 1993), pp. 11, 15.

[108] J. Kornai, "Anti-depression cure for ailing postcommunist economies", World Bank, *Transition. The Newsletter About Reforming Economies,* Vol. 4, No. 1 (Washington, D.C.), February 1993, p. 2.

[109] J. Sachs, op. cit., p. 210.

[110] Ibid., pp. 198-199.

[111] Ibid., p. 198.

[112] I. Berend and G. Ránki, *The European Periphery and Industrialization 1780-1914* (Cambridge, Cambridge University Press, 1982).

[113] I. Berend, *Decades of Crisis: Central and Eastern Europe Before World War II* (Berkeley, University of California Press, 1998).

The aggregate, comparative index of economic development levels (table 2.1.1), GDP per capita, clearly shows that during the three quarters of a century, between 1870 and 1989, the market and private economy could not generate automatic prosperity and stimulate a catching-up process. Central and eastern Europe's relative position vis-à-vis western Europe and the overseas west remained unchanged. Ironically, state socialism with its planned economy generated a slight transitory catching up between 1950 and 1973, but this was followed by an even steeper decline. Ultimately, the region landed on a lower peripheral level than ever before, or, using Jeffrey Sachs' metaphor, "was lost in the valley of tears" for all of the modern era.

The transitory strength, and, in some places, popularity of state socialism emerged partly from its guarantee of social security for the entire population, and partly from its promise to cope with historical backwardness and provide prosperity and high living standards. The regime, in the last analysis, collapsed because security became endangered during the 1980s, and the regime could not fulfil its programme and advance to the Promised Land. Instead, a seemingly unsolvable and deepening crisis emerged. The regime's legitimacy, based on its temporary success, was undermined; a deep disappointment penetrated the masses and even the elite.[114] The peoples of the area longed for a change, and, as the leading slogan of 1989 clearly reflected, wanted to "join Europe". As the demonstrators, welcoming Secretary of State, James Baker, in Tirana airport, expressed it on their posters: "Albania wants to be like America!".

The change of the regime, however, is far from equivalent to an automatic beginning of sustained growth and catching up. As an economic historian of the region, I strongly argue against the implicit assumption of a great deal of transformational literature suggesting that sustained economic growth and catching up with the west automatically follows when a country adopts the western market model.

TABLE 2.1.1

Per capita GDP in central and eastern Europe, 1870-1989
(Percentage of the west)

	1870	*1913*	*1938*	*1973*	*1989*
Western Europe	44	44	44	45	40
Overseas west	32	30	35	38	32

Source: A. Maddison, *Monitoring the World Economy 1820-1992* (OECD, Paris, 1995), p. 212.

At this point, I must return to the often analysed question of economic decline, or "transformational recession" in the early 1990s. Was it, indeed, a merely unavoidable consequence of changes from the plan to the market, as, among many others, János Kornai argued?[115] In my view, the "transformational recession", as Kornai named it, was only one element of a long, deep, and complex economic crisis in the area. One should not forget that the crisis had begun much earlier, basically in the mid- or late 1970s, when the steam had already run out of the economic drive of forced industrialization in central and eastern Europe. Growth slowed significantly – from an annual 3.1 per cent and 3.5 per cent between 1950 and 1973 to 1.3 per cent and 1.2 per cent between 1973 and 1989 in Czechoslovakia and Hungary, respectively.[116] Between 1978 and 1983, Polish GDP declined by more than 10 per cent. During the second half of the 1980s, Romania experienced 0.7 per cent, Yugoslavia 0.5 per cent, and Poland 0.2 per cent annual growth, compared with the 3.6 per cent growth rate of the OECD countries. Aside from this, the terms of trade for the state socialist countries began to deteriorate: during the first decade after the 1973 oil shock, they suffered a 20 per cent decline, and for some countries the decline was even 26-32 per cent. Foreign trade deficits dramatically increased, and almost all of the countries in the region fell into an indebtedness trap. By the time of the collapse of the regime, Poland had accumulated nearly $42 billion, Hungary more than $20 billion, Bulgaria nearly $10 billion, and the state socialist countries altogether $110 billion in foreign debts. Debt service consumed a substantial portion – 40 per cent to 75 per cent – of the countries' hard currency income.[117] Quite a few countries started to lose control over inflation. Thus a general economic crisis characterized the last one and a half decades of state socialism. Transformation, however, except in Hungary and Poland, was not yet on the agenda. This crisis, needless to say, did not end with the collapse of the regime, but continued; moreover, it became even more serious.

We have witnessed a long economic crisis in central and eastern Europe from the mid-1970s to the present. A quarter-century long crisis is not unknown in economic history. This is a kind of Great Depression, of the sort Europe experienced during the last third of the nineteenth century, then in the interwar decades, then again during the last third of the twentieth century. The phenomenon is well explained by economic cycle theories. I prefer, as the most convincing and proven, Joseph Schumpeter's theory on structural crisis. Caused by a major "set of technological changes", the replacement of the old technological regime by a new one, leads to the decline of the old leading sectors and export branches based on old technology. This generates a wide-ranging slowdown and decline, and causes an economic crisis even in rich, advanced countries. It happened at the end of the 1970s and early 1980s, when, even in the west, double-digit rates of inflation and unemployment, and a significant decline in output were the destructive effects of the structural crisis. However, rising new technology, "the technical advances in microelectronics", as Everett Rogers stated, "that occurred in the 1970s and 1980s have spurred the communication revolution ... [connected with the emergence of new] high-technology industry ... one in which the basic technology underlying the industry changes very rapidly".[118] A new infrastructure emerged, as Daniel Bell called it, a "post-industrial society", with an increasing number and share of white-collar employment in the ever-growing service sector. The adjustment to the new technology led to the emergence of new industries and new leading export sectors. The structural crisis, as Schumpeter explains, led to a "creative destruction", paving the way for new technology and prosperity. This adjustment created, indeed, solid ground for an impressive new boom in the United States and some other advanced countries.

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[114] I. Berend, *Central and Eastern Europe 1944-1993: Detour from the Periphery to the Periphery* (Cambridge, Cambridge University Press, 1996).

[115] J. Kornai, *Transformational Recession. A General Phenomenon Examined through the Example of Hungary's Development*, Collegium Budapest, Institute for Advanced Study, Discussion Paper No. 1, June 1993.

[116] A. Maddison, *Explaining the Economic Performance of Nations* (Aldershot, Edward Elgar, 1995), p. 97.

[117] I. Berend, *Central and Eastern Europe 1944-1993...*, op. cit., pp. 230-231.

The structural crisis in the backward areas, however, has a somewhat different outcome. It is definitely destructive, but lacks the creative impact. The peripheral countries of the world economy suffer more because of the severe decline of their terms of trade. Prices and markets for their export items, less processed and much less sophisticated than those of the core countries', drastically declined. They do not have sufficient sources for research and development, know-how and financial sources to follow closely the new technological-industrial revolution, and thus build new leading export sectors. In other words, they suffer all the negative consequences of the structural crisis but are unable to catch the stormy wind of technological change in their sails. The "peripheral structural crisis", as I call this phenomenon, is destruction without creation. Central and eastern Europe experienced this situation three times from the 1870s to the 1970s-1990s and had only a "backward" exit. The countries of the region preserved their obsolete economic branches and export sectors, and sold the otherwise unsaleable old products in the safe and highly protected regional market. That was guaranteed before the First World War in the framework of a multinational empire (Habsburg or Russian) and, in the twentieth century, in an alliance system led by a nearby great power (Hitler's Germany, then the Soviet Union).

After the collapse of state socialism, this type of "backward" exit from the structural crisis was blocked. Without technological adjustment, the only shield against competition on the world market, although counterproductive in the long run, was Comecon isolation and regional self-sufficiency. After 1989, however, the countries of the region lost the protective shield of the safe and undemanding Comecon market and were forced to enter the world market and compete with the advanced countries, which have already adjusted to the new technological age. Moreover, they had to compete not only on the world market, but also on their own, opened domestic markets. As a consequence, the peripheral structural crisis, underway since 1973, not only continued but also became much deeper during the 1990s.

Serious policy mistakes also contributed to the economic drama of the early 1990s. Richard Portes noted "serious macroeconomic policy errors ... [such as] initial excessive devaluation of the currency". Instead, he recommended: "do not devaluate excessively; peg initially: then go to a crawling peg". Another major policy mistake was that "the opening to trade with the west – with convertibility, low tariffs, and few quantitative restrictions – was too abrupt...".[119] Domenico Nuti rejected the interpretation of economic decline as a "necessary concomitant of transition". In his view, it was an "unnecessary consequence of policy failure", most of all "the failure in government management of the state sector".[120]

Although the march towards Europe and from plan to market, in the long run, are very positive changes in the region, and is the only promising road after the failure of state socialism, the economic policy adopted during the first part of the transition period was, in many respects, mistaken. The difficult transformation process required a pragmatic and ideologically unbiased approach to reality. The countries of transformation should not have had to attempt to jump directly from a centrally planned to a laissez-faire economy, from an entirely state owned to a completely privatized economy. State regulation and government policy were needed in the difficult transformation process when self-regulating mechanisms were not yet developed and market imperfections and non-market friendly behaviour among the players was the rule. A regulated market, instead of a self-regulating market, a mixed economy with a restructured and efficient state owned sector for at least a period of time, and a "fine mixture between market and state"[121] would have been a more natural transition from plan to market. This approach, however, was immediately rejected and most of the transforming countries rushed to join the Reaganites and blame "big government" and state intervention. It caused unnecessary pain and led to the collapse of a great many old companies, which had to be sold for a fraction of their previous value. As a result there was mass unemployment, a sharp decline in living standards, especially for certain rather vulnerable sections of society. People in poverty, those with incomes of less than 35 to 45 per cent of the average wage, increased from 14 to 54 per cent in Bulgaria, from 4 to 25 per cent in the Czech Republic, from 25 to 44 per cent in Poland and from 34 to 52 per cent in Romania during the early 1990s.[122] "Living standards of 57 per cent of the population of Russia", reported the journal of the World Bank in October 1999, "are below the minimum subsistence level … the average life expectancy does not exceed 61.7 years".[123] Social polarization, an emerging mortality and health crisis, sharply declining life expectancy – all of them phenomena typical of nineteenth century "wild capitalism", or, very late twentieth century "bandit capitalism", as two leading economists have named it.[124]

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[118] E. Rogers, *Communication Technology. The New Media in Society* (New York, Free Press, 1986), pp. 14-15.

[119] R. Portes, "From central planning to market economy", in S. Islam and M. Mandelbaum (eds.), op. cit.

[120] D. Nuti, "How to contain economic inertia in the transitional economies?", World Bank, *Transition. The Newsletter About Reforming Economies,* Vol. 3, No. 11 (Washington, D.C.), December 1992-January 1993.

[121] G. Kolodko, *Transition to a Market Economy and Sustained Growth: Implications for the Post-Washington Consensus* (New Haven, Yale School of Management, 1999), p. 45.

Can all these be considered as just the unavoidable negative side effects of a positive transformation? Did the economic and social decline become much steeper and deeper simply because the "transformational recession" was deepened by severe policy mistakes? Peter Murell's theoretical explanation hit the nail on the head: "Economic and political decisions", he maintains, "are circumscribed by limits in social knowledge … inherited from the past…. If one attempts to eradicate all … characteristics [of existing organizations] immediately, then one invites economic collapse…. Large changes in the legal and policy framework produce highly dysfunctional outcomes…".[125] Not only speed and scope, but the inappropriate adoption of the laissez-faire market model also caused "highly dysfunctional outcomes". Grzegorz Kolodko, arguing against laissez-faire policy,[126] quotes three genuine authorities, George Soros, the World Bank, and the IMF's Stanley Fischer: "The untrammeled intensification of laissez-faire capitalism and the spread of market values into all areas of life", warns Soros, "can cause intolerable inequities and instability".[127] "Establishing a social consensus will be crucial for the long-term success of transition", argues the World Bank in its report on "From Plan to Market", since "societies that are very unequal in terms of income, or assets, tend to be politically and socially less stable and to have lower rates of investment and growth".[128] Stanley Fischer argues in the same way: "adjustment programmes that are equitable and growth that is equitable are more likely to be sustainable".[129]

Regulation, state intervention and a mixed economy are among the requirements for central and east European transformation. After a decade, it is clear that all of the transformational economies are mixed economies, and this fact, provided that they adopted good policies, has not at all blocked the road to successful transformation. In Hungary, one of the success stories of transformation, "under the privatization law, 92 firms will remain in permanent state ownership".[130] In another of the most successful transforming countries, Slovenia, "the state still owns more than 50 per cent of total assets in the economy".[131] The state needed, and still needs, to guide the extremely complex process of transformation. In 1997, the World Bank called attention to the important role of government in the various fields where market automatism will not work.[132] Governments have a role in macroeconomic policy, in investment in basic social services, education, training, and infrastructure, and in creating and maintaining a strong social safety net in order to prevent disastrous social side effects for the most vulnerable members of society.

The unavoidable "transformational recession", together with the avoidable policy mistakes, and the adoption of laissez-faire concepts and policies – although more visible on the surface – were additional factors in the prolonged peripheral structural crisis, which was the basic cause of long-term decline. The interpretation of the east European economic crisis as basically a long depression due to non-adjustment to a changing world economy, a peripheral structural crisis (deepened by transitory factors), might be strengthened by comparing it with the strikingly similar performance of other peripheral but non-state socialist countries in the world.

Latin America offers a telling parallel: from the mid- to late 1970s, as in central and eastern Europe, the same economic troubles emerged. Growth rates slowed significantly from an annual average of 2.5 per cent to 0.8 per cent. The terms of trade deteriorated by some 20 per cent to 30 per cent, as in eastern Europe, and the trade deficit became unsustainable. Mexico had an annual trade deficit of about $20 billion throughout the 1980s.

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[122] UNICEF, "Central and eastern Europe in transition: public policy and social conditions: crisis in mortality, health and nutrition", *Economies in Transition Studies, Regional Monitoring Report*, No. 2, August 1994, p. 2.

[123] World Bank, *Transition. The News Letter About Reforming Economies*, Vol. 10, No. 5 (Washington, D.C.), October 1999, p. 35.

[124] N. Stern and J. Stiglitz, *A Framework for a Development Strategy for Market Economy: Objectives, Scope, Institutions and Instrument*, EBRD Working Paper, No. 20 (London), April 1997.

[125] P. Murell, "Evolutionary and radical approaches to economic reform", in K. Poznanski (ed.), op. cit., p. 222.

[126] G. Kolodko, *Ten Years of Post-socialist Transition. Lessons for Policy Reform,* World Bank Working Paper Series, No. 2095 (Washington, D.C.), 1999. (The next three quotations are from pp. 14, 17.)

[127] G. Soros, "The capitalist threat", *The Atlantic Monthly,* February 1997.

[128] World Bank, *From Plan to Market. World Development Report 1996* (Washington, D.C.), 1996.

[129] S. Fischer, "Opening remarks", IMF Conference on Economic Policy and Equity (Washington, D.C.), June 1998, p. 1.

[130] EBRD, *Transition Report Update, April 1999* (London), 1999, p. 38.

[131] Ibid., p. 44.

[132] World Bank, *The State in a Changing World. World Development Report 1997* (Washington, D.C., Oxford University Press, 1997).

Indebtedness, however, was only a temporary solution and became a long-term trap and disaster: Brazil, Mexico, and Argentina accumulated billions of dollars in debt which surpassed their exports by three to five times and debt service consumed 50 to 62 per cent of their export income. The striking similarity between Latin American and east European economic performance clearly exhibits the region-specific, and thus the peripheral character of the crisis.[133]

2.2 Adjustment and recovery

Believers in market automatism, however, argue that consistent reforms in central Europe have already led to the stage of sustained growth, while hesitant reforms in the Balkan and post-Soviet countries have held them back in the valley of tears. The European Commission, evaluating economic transformation,[134] announced on 15 July 1997 that "Hungary can be regarded as a functioning market economy. Liberalization and privatization have progressed considerably.... Hungary should be able to cope well with competitive pressure and market forces within the Union in the medium term.... Hungarian enterprises are already competitive in EU markets...". The same was said about the Czech Republic, Poland and Slovenia.

Regarding Romania's preparedness, although "considerable progress in the creation of a market economy" was recognized, for example, "prices have been almost fully liberalized", but the European Union criticized, among others, the "still fragile legal system" and the "lack of coherence of policy making on economic issues". Furthermore, "much of Romania's industry is obsolete and agriculture needs to be modernized. The low levels ... of skills among the workforce also suggest that the economy needs a number of years of sustained structural reforms"; thus, "Romania would face serious difficulties to cope with competitive pressure and market forces within the Union". Similar statements could be made about several other Balkan and post-Soviet countries.

In a group of six central European countries – Croatia, the Czech Republic, Hungary, Poland, Slovakia, and Slovenia – the Commission judged that market economies are functioning, economic decline and rapid inflation are over, and the annual economic growth is impressive. These "well functioning market economies" had basically recovered from their earlier decline and most had regained their 1989 levels of per capita GDP (table 2.2.1).

It is important to be clear that reaching the 1989 economic level in 1999 does not prove that these countries have arrived at "the other end of the valley of tears" and already enjoy the "sunlight of western freedom and prosperity".[135] They hit the bottom then recovered the deep decline. Moreover, industry had recovered in only two countries, Hungary and Poland. Real industrial output reached its 1989 level in these countries in 1997-1998, while in the Czech Republic, Slovakia and Slovenia it had recovered to only 75-80 per cent by 1999.[136] But we should not forget that the gap between them and the west, increased in a single decade from a ratio of nearly 1:2 in 1989 to 1:3-1:4 in 1999. The gap between east and west, as a consequence, is larger than ever it has been in modern history.

In some countries, decline has re-emerged or continued, and as a result they have lagged increasingly behind, nearing non-European standards. Bulgaria and Romania, after the severe decline in the early 1990s and a partial recovery of the mid-1990s, experienced a new crisis when output and GDP declined again. In Russia and Ukraine, as well as several other successor states of the Soviet Union, decline continued without a break throughout the entire decade. As a consequence, in 1999, Bulgaria and Romania had reached only 66 and 74 per cent of their respective 1989 GDP levels. Russia (53 per cent) and Ukraine (35 per cent), and the entire Commonwealth of Independent States (53 per cent) had arrived at only half of their 1990 level in 1999.[137] In 1989, the ratio between the GDP of Russia and Poland was about 7:1, by 1998; it was roughly 3:1.[138]

The utterly different performances of Russia and the Balkans, compared with central Europe, are often explained by a lack of determination to pursue radical reforms. This certainly has relevance. However, the major difference between the economic performance of central Europe, the Balkans and Russia has important causes in addition to hesitant reforms. Besides pursuing systemic change, the countries in transformation also have to adjust to the structural crisis, by restructuring their economies according to the requirements of modern technology and, on this basis, reach a sustained and higher than average rate of economic growth. Restructuring and adjustment, i.e. technological and structural transformation of the economy, are central elements of the transformation, and, in some sense, the end and essence of it. However, only a few countries have begun the process, while very little or nothing has been done in two thirds of the region's economies.

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[133] I. Berend, "End of century global transition to a market economy: laissez-faire on the peripheries?", in I. Berend (ed.), *Transition to a Market Economy at the End of the 20th Century* (Münich, Südosteuropa-Gesellschaft, 1994), p. 14.

[134] "Agenda 2000. Summary and conclusion of the opinions of the commission concerning the applications for membership to the European Union Presented by the Candidate Countries. Strasbourg-Brussels, 15 July 1997", quoted in T. Veremis and D. Triantaphyllou (eds.), *The Southeast European Yearbook 1997-1998* (Athens, Hellenic Foundation, 1998), pp. 333, 339, 344, 349.

[135] M. Mandelbaum, op.cit.

[136] UN/ECE, *Economic Survey of Europe, 1998 No. 2*, pp. 146-148.

[137] Ibid.

[138] G. Kolodko, *Transition to a Market Economy...*, op. cit., p. 74.

TABLE 2.2.1

GDP in selected central and east European countries, 1990-1999
(Percentage change from previous year)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998**	*1999**	*1999/1989*
Croatia	-9.3	-28.7	-11.7	-8.0	5.9	6.8	6.0	6.5	2.5	1.0	79
Czech Republic	-1.2	-14.2	-3.3	0.6	3.2	6.4	3.9	1.0	-2.7	–	95
Hungary	-3.5	-11.9	-3.1	-0.6	2.9	1.5	1.3	4.4	5.0	4.2	99
Poland	-8.0	-7.6	2.6	3.8	5.2	7.0	6.1	6.9	4.8	3.0	121
Slovakia	-2.5	-14.5	-6.5	-3.7	4.9	6.9	6.6	6.5	4.4	1.0	101
Slovenia	-4.7	-9.3	-5.5	2.8	5.3	4.1	3.3	3.8	4.0	3.8	107

Source: For 1990-1991: Wiener Institute für Internationale Wirtschaftsgeschichte, *Research Report*, No. 207 (Vienna), July 1995; 1992-1999: EBRD, *Transition Report Update, April 1999* (London), 1999, p. 6.

The potential for adjustment to modern technology and new economic structures are not automatic outcomes of marketization and privatization. Even consistent reforms are unable to guarantee success; they represent only the very first steps in a long process of required adjustments. "Only a part of the multi-layer transition process, namely liberalization linked with stabilization, can be executed … in a radical manner," stated Grzegorzg Kolodko, one of the main architects of Polish transformation. "As for structural adjustment … and behavioural change, they will take a long time under any conditions".[139] It needs, argued Peter Murell, a different social knowledge and behaviour, since "socioeconomic mechanisms are information-processing devices … a society's stock of personal knowledge is acquired through a long historical process shaped by the institutions and organizations of that particular society".[140] Transformation is not only "a process leading from plan to market," as Marie Lavigne argues, "it could also be … a process leading from underdevelopment to development".[141] Transformation, without development, is quite senseless. If the countries remain in a backward state on the periphery of Europe, with huge masses of people in poverty, systemic change results only in inefficient capitalism instead of inefficient socialism. Both have had a long history in the area and, moreover, they have generated each other. Transformation must therefore lead to sustained growth and catching up with western Europe. "When is transition over?" asks Marie Lavigne. When the transforming countries approach the economic level of the least developed members of the European Union. According to Stanley Fischer, et al., and Tsuneo Morita, if they achieve a growth rate in the range of 4.5 per cent to 6 per cent annually against an assumed 3 per cent growth in the low-income countries of the EU, it may take, in the best possible scenario, about 30 years. The Czech Republic may reach that level in 10-15 years, Hungary, Poland, and Slovenia in 20-25 years, Lithuania and Romania in 35 years, and Albania in 65-75 years.[142]

The way towards sustained growth and catching up leads through structural adjustment. Reforms and systemic change, no doubt, have already triggered such a development. Deregulation, the elimination of previous state socialist restrictions, have triggered an elemental private initiative in some of the countries. Business-like behaviour is widespread and entrepreneurial attitudes have been revitalized, and domestic capital accumulation increased. It has become the prime mover of economic growth and also a major factor in economic restructuring throughout the region. It required certain traditions and legacies, carried partly by the older generations but, in a way, transmitted to the younger ones. Reforming state socialist countries had tremendous advantages in this respect because entrepreneurial skills and business-like behaviour had already became a part of the accepted value system. However, the social-political environment during the transition period also played an important role. An optimistic view about the future of the country, a belief in the potential for economic recovery and future prosperity, are important prerequisites for domestic capital accumulation. The lack of national self-confidence in a humiliated and frustrated society generates capital flight to the save havens of prosperous foreign countries. (Capital outflow from Russia is estimated to have amounted to about $150-$200 billion during the 1990s.)

The most spectacular result of privatization and domestic accumulation was the foundation of millions of new, mostly family, enterprises. These investments have generated the most important structural change to date, namely, the rise of the previously neglected and backward service sectors in central and eastern Europe. During the first half of the 1990s, the share of services in the GDP of Hungary, Poland and the Czech Republic increased from 55, 36 and 32 per cent in 1990, to 63, 56 and 53 per cent, respectively, by 1994.[143] This trend was characteristic of even the more backward regions. In Bulgaria, the share of services in GDP increased from 30 per cent to 47 per cent.

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[139] Ibid., p. 28.

[140] P. Murell, "Evolutionary and radical approaches to economic reform", in K. Poznanski (ed.), op. cit., pp. 219, 221.

[141] M. Lavigne, *The Economics of Transition. From Socialist Economy to Market Economy* (New York, St. Martin's Press, 1999), p. 276.

[142] S. Fischer, R. Sahay and C. Végh, *How Far is Eastern Europe from Brussels?*, IMF Working Paper WP/98/53 (Washington, D.C.), April 1998; T. Morita, "The hidden growth potential of EU candidates," World Bank, *Transition. The News Letter About Reforming Economies,* Vol. 10, No. 5 (Washington, D.C.), October 1999, p. 9.

Hand in hand with this process, radical change also occurred in the size-structure of enterprises. The previously existing well-known "upturned pyramid," the top heavy structure of enterprises, with absolute domination by a few huge companies and the relative lack of small-scale units was replaced in a few years by a normal pyramid structure.[144]

The key elements of adjustment, however – the adoption of revolutionary new communication technology, the emergence of high-technology industries, and the creation of a competitive, highly productive export sector – in most cases, have not been achieved. This process has just started in Hungary, Poland, Slovenia, the Czech Republic, and Slovakia. The Balkan countries and Russia, with other members of the Commonwealth of Independent States, about two thirds of the former Soviet Bloc, are not even close to launching a successful technological-structural transformation and have descended into a continued and deepening crisis.

Central and eastern Europe, similarly to other peripheral regions, has never been able to pioneer technological revolutions. Insufficient resources for research and development, lack of knowledge and know-how, mediocrity and other cultural factors have always been obstacles to innovation and have never allowed a pioneering role in technology for a peripheral country in modern history. Many scientists and inventors, from the turn of the century on, left the areas to realize their dreams and become successful in one of the richer countries.

Although peripheral countries, in the best of cases, have made minor contributions to technological innovation, in appropriate historical circumstances they were able to adopt western technology, accommodate themselves to the technology leaders and follow their footsteps. Since the 1870s, this has been mostly connected with direct foreign investments resulting in the establishment of new firms and the introduction of modern western technology and know-how.

During the last third of the twentieth century, the extreme harshness of the structural crisis in eastern Europe emerged largely as a consequence of the region's total inability to adjust to the new world economy under state socialism. During the half century after the Second World War, the central and east European countries were less able than ever before to accommodate themselves to the western technological and structural transformation. This extreme situation resulted partly from the import-substitution policy of the Soviet Bloc, the lack of entrepreneurial and market incentives, and the region's self-isolation from the "capitalist world market". However, a major, if not the major, factor of the Soviet Bloc's incapacity was the Cold War, which inspired a strict western embargo on modern technology transfer to the east.

The National Security Council of the United States concluded in December 1947 that: "US national security requires the immediate termination … of shipments from the United States to the USSR and its satellites … which would contribute to Soviet military potential". The intent of the policy was "to inflict the greatest economic injury to the USSR and its satellites".[145] NATO and, a few months after its foundation, the new Coordinating Committee for Multilateral Export Controls (COCOM), established in November 1949, institutionalized this policy. Even the export of products of "secondary strategic significance" such as steel rails and trucks, the export of between 2000 to 3000 commodity categories was banned. The Bucy Report of February 1976, enforced in August 1977, recommended the ban of any kind of assistance for infrastructural development, building entire factories, and selling advanced technology in general. "The widespread use of computers, even in commercial applications, enhances the 'cultural preparedness' [of the communist countries] to exploit advanced technology".[146] From 1979, the export of all new technological achievements was strictly forbidden: computer network technology, large computer system technology, software technology, telecommunications technology, microwave component technology, advanced optics and sensor technology. The list "contains a virtual roll call of contemporary techniques, including videodisk recording, polymeric materials and many dozens of others".[147] Consequently, the traditionally accommodating economies of central and eastern Europe, could not buy and introduce modern communications technology and were unable to follow the technological revolution of the 1970s-1980s.

2.3 Transnationalization – its pros and cons

The window of opportunity slowly opened after 1989. Although domestic capital accumulation and good economic policy can make a difference, successful adjustment to the transforming world economy, and an appropriate response to the challenge of structural crisis is impossible without massive western investments and the participation of transnational companies, the main carriers of modern technology and innovation.

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[143] P. Marer, "Comparative privatization and restructuring in Hungary, Poland, and the Czech Republic, 1989-1995", in I. Berend (ed.), *Long-Term Structural Changes in Transforming Central and Eastern Europe* (Münich, Südosteuropa-Gesellschaft, 1997), p. 140.

[144] E. Ehrlich, *Shift in the Size Structure of Manufacturing Establishments and Enterprises: An International Comparison*, Institute for World Economics Working Papers (Budapest), 1993, p. 18.

[145] W. Long, *US Export Control Policy* (New York, Columbia University Press, 1989), p. 15.

[146] M. Mastanduno, *Economic Containment. COCOM and the Politics of East-West Trade* (Ithaca, Cornell University Press, 1992), p. 194.

[147] Ibid., pp. 213-215.

The role of foreign direct investment and transnational companies, however, is often more than ambiguous. A sharp debate emerged about imperialism and the role of foreign investment at the turn of the century. On the one hand, it was often stated that capital exports were the vehicle of exploitation and dominance, especially in very backward countries where capital needs were limited. Capital exports accelerate uneven development: the exporting countries develop at the expense of their subordinated peripheries. Capital exports and imports is thus a zero sum game. The participants either gain or lose and the winner, in the contemporary world, is the transnational company, while the losers are the exploited peripheries. In the globalized world, it may also lead to "serious erosion, if not a total elimination, of national policy autonomy".[148]

On the other hand, liberal and neo-liberal economics maintain the positive role of foreign investments as the main generator of development and prosperity. According to this view, both parties gain from the interrelationship, and economic growth and the standard of living increase faster in the poorer countries. Foreign investments, thus, generate worldwide convergence.

Regarding the turn-of-the-century situation, "the conclusion we can draw from the history of the European periphery," I stated in a book written with G. Ránki in the early 1980s is that it, "permits no facile generalizations".[149] The result of foreign investments in some cases, as we proved, was very positive and in others, negative for the recipient countries. J. Crotty, G. Epstein and P. Kelly have argued recently in a similar way: "direct foreign investment is neither inherently good nor bad", and the outcome of the activity of transnational companies and their investments "will strongly depend on the overall national and international context within which capital mobility occurs".[150] G. Myrdal rightly stressed the importance of the transportation and communication potential of the receiver country, its educational level, and its value system, which determine the positive effects of the "centrifugal spread of economic expansion".[151] Others note the importance of the nature of the domestic and international rules of the game, the role of institutions and competition, and the traditions and entrepreneurial skills in a given country. In some situations, foreign investments may generate a spin-off effect and even a catching-up process. In others, just the opposite happens.

The question, on the one hand, was whether the technology leaders were ready and interested to invest and transfer the new technology and knowledge to the transforming countries, and, on the other hand, whether the countries of the region were prepared to receive and use these investments to generate genuine spin-off effects and economic progress. The inflow of capital began immediately in 1989-1990 but, until 1995, nearly half of the $23.2 billion of direct foreign investment in central and eastern Europe was channelled to Hungary ($11.4 billion). Hungary, in that period, received more than all the successor states of the Soviet Union together ($6.4 billion). During the second half of the decade, however, capital inflow significantly increased in a few other countries as well.

This inflow of less than $100 billion in a decade (table 2.3.1) is rather small compared with the world total of international direct investment, which was roughly $2 trillion in that period. However, a new and particular characteristic of direct investment at the end of the century in a globalized world is that when the opportunity arises in the region, the investor countries invest mostly in each other's countries: in 1989, 75 per cent of these investments went into the five most developed countries. Moreover, as A. Bhaduri notes: direct investment "accounts for only a tiny fraction" of the volume of foreign exchange transactions in currency and other financial assets, which, as the main characteristic of economic globalization, reached nearly $1.3 trillion per day in the mid-1990s, (compared with $15 billion per day in 1973).[152]

Nevertheless, foreign direct investment has played an important role in the region, but only in the three frontrunners of transformation and in the small Baltic countries and Slovenia. The Czech Republic, Hungary, and Poland received nearly three quarters of all foreign direct investment in central and eastern Europe, including the Baltic countries, and more than half of the total investment in the east, including Russia and the other successor states. Western investors, counting on a per capita basis, also preferred some of the small countries such as Estonia ($947), Latvia ($634) and Slovenia ($596), especially during the second half of the decade. During the last years of the decade, annual foreign investment reached 3-4 per cent of the GDP of the favoured countries, while in Russia it remained at only a fraction of 1 per cent.[153] The comparative attractiveness of a country for foreign investors, measured by the stock of direct foreign investment relative to GDP, shows the unquestionable lead of Hungary and Estonia with 39 and 35 per cent, respectively. They are among the leading recipients of foreign investment, while the Czech Republic and Latvia have surpassed the world average of 15 per cent. Slovenia and Lithuania are on the world

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[148] H. Chang, "Globalization, transnational corporations, and economic development: can the developing countries pursue strategic industrial policy in a globalizing world economy?", in D. Baker, G. Epstein and R. Pollin (eds.), *Globalization and Progressive Economic Policy* (Cambridge, Cambridge University Press, 1998), p. 107.

[149] I. Berend and G. Ránki, op. cit., p. 140.

[150] J. Crotty, G. Epstein and P. Kelly, "Multinational corporations in the neo-liberal regime," in D. Baker et al. (eds.), op. cit., p. 119.

[151] G. Myrdal, *Economic Theory and Underdeveloped Regions* (London, Gerald Duckworth, 1957), p. 34.

[152] A. Bhaduri, "Implications of globalization for macroeconomic theory and policy in developing countries," in D. Baker et al. (eds.), op. cit., p. 152.

[153] EBRD, *Transition Report Update, April 1999* (London), p. 12.

TABLE 2.3.1

Foreign direct investment in central and eastern Europe, 1989-1999
(Billion dollars)

	Total inflow 1989-1999 (billion dollars)	*Inflow per capita (dollars)*
Czech Republic	13.5	1 350
Hungary	18.3	1 830
Poland	24.8	653
Central Europe, Baltic states and Balkans ...	72.1	566
Former Soviet Union	23.7	84

Source: EBRD, *Transition Report Update, April 1999* (London), 1999, p. 12; World Bank, *Transition. Newsletter About Reforming Economies*, Vol. 10, No. 5 (Washington, D.C.), October 1999.

average, while the Balkan countries' stock of foreign direct investments reached only 5-6 per cent of their GDP.[154]

Not all of these investments have contributed to restructuring. Some of them served only to enlarge the investors' markets. Major American film distributors bought up movie theatres in order to screen Hollywood movies. Retail chains were acquired: the Austrian-German Meinl took over a great part of the former state owned Hungarian supermarket network. The Danone Group, one of the world's largest producers of dairy products, established a series of subsidiaries in Poland, the Czech Republic, Hungary, and Bulgaria during the first half of the 1990s. "In strategic terms," stated the Chairman of the company in his annual report in 1994, "we persue a very active acquisition policy … targeting markets outside western Europe".[155] Quite a few multinational companies also gained access to local and regional markets. Major tobacco companies, Colgate-Palmolive, PepsiCo, Nestlé, Ikea and many others invested only in order to enlarge their markets. Quite a few of them gained monopoly positions in the region. In spite of the short-term advantage of substantial investments, and the significant improvement of supply, market acquisition weakens the domestic market for domestic producers in the long run, and is therefore counterproductive from a local point of view.

Key investments were made, however, in the most backward infrastructural sphere, especially telecommunications, that serves as the basis for any kind of technological progress. In a few, rapidly changing countries, some of the world's telecom leaders began investing and modernizing. Hungary went furthest by selling 67 per cent of MATÁV, the formerly state owned telecom monopoly, to Ameritech International and Deutsche Telecom. Only 6.5 per cent of the ownership remained in the hands of the state. Estonia sold 49 per cent of Estonia Telecom Ltd. to BalTel, Lithuania sold 60 per cent of Lietuvos Telecom to Amber Teleholding. Poland sold the first 25 per cent of TPSA at the end of 1998. Three international telecommunication companies, AT&T, Alcatel and Siemens gained ground in Poland. In many other countries of the region, state ownership of telecommunications remained dominant (74 per cent in Slovenia, 51 per cent in the Czech Republic), or remained untouched as in Bulgaria, Romania, Slovakia and the successor states of the Soviet Union,[156] and foreign investment did not generate modernization.

Foreign direct investments have revolutionized Hungarian telecommunications. In 1990, only 9.6 main telephone lines existed per 100 people; in 1995 this improved to 18.5 and by 1997 the number had increased to 33.2. Meanwhile, between 1990 and 1998, the number of mobile cellular telephone subscribers increased from 0.03 to 8.4 per 100 inhabitants and is rapidly approaching western levels. In 1990, the Hungarian telecommunication system was ranked forty-fifth among 56 analysed countries; in 1995, it ranked thirty-fourth, near to the medium standard, and by the end of the decade, it was in the top third. While the Czech Republic started at a higher level (15.8 main phone lines per 100 people in 1990), Slovenia and Estonia have reached more or less the same level as Hungary, and most of the others are behind. Moreover, the ranking of Russia (43 to 52), Bulgaria (28 to 48), Romania (41 to 54) and Ukraine (50 to 53) has declined to the bottom of the 56-country sample. Starting from virtually zero, the number of internet hosts (varying between 25 and 50) and internet users (varying between 100 and 200) per 10,000 inhabitants, reached the medium western level in the Czech Republic, Estonia, Hungary and Slovenia, surpassing France, Italy and Japan already by the mid-1990s. On the other hand, Bulgaria, Romania, Russia, and Ukraine have hardly moved from 1 to 2 internet hosts and 5 to 15 internet users per 10,000 people.[157]

Foreign investors slowly began creating modern industrial branches and competitive export sectors in the Czech Republic, Estonia, Hungary, Poland and Slovenia. Until the mid-1990s, however, only one quarter to one third of foreign direct investment went into industry in the Czech Republic, Poland and Slovakia. Hungary is exceptional with nearly 80 per cent going into industry.[158] As in the spectacular Spanish and Irish economic miracles between the mid-1970s and the 1990s, when traditional local industries developed only slightly but transnationalization generated unparalleled growth in modern sectors, here too the transnational companies are the main actors. A few major companies sought to exploit the low wage level of the qualified labour force, quite a rare combination in less developed countries. Average wages in the Czech Republic and Hungary are less than one tenth of the German level. As Anna Krajewska maintains in the case of Poland, "a mean wage of $250 is one of the important motives in making direct investments … especially in labour-intensive industries". Labour costs in Portugal, the lowest in the European Union, are three and a half times higher than in Poland.[159] Using the region as a low cost base for exports, and gaining an important market share within the region, a number of leading transnational companies have moved to some of these countries. Besides, central European countries have a geopolitical advantage as well: their closeness to the west and well-developed transportation systems. These countries also have a historical-cultural closeness to the west, an environment suitable for western economic activity. Late nineteenth to twentieth century experience and traditional economic connections, especially with Germany, have also helped the renewal of cooperation. Central Europe belonged to the German *Grossraumwirtschaft* during the 1930s-1940s, and Germany became the number one trade partner and investor in most of these countries in the 1990s.

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[154] World Bank, "Foreign direct investment: new trends in transition countries", *Transition. Newsletter About Reforming Economies*, Vol. 10, No. 5 (Washington, D.C.), October 1999, p. 8.

[155] M. Koparanova, "Danone-Serdika J.S. Co.", *Eastern European Economics*, Vol. 36, No. 4, July-August 1988, p. 28.

[156] E. Ehrlich, *The Communications Infrastructure of the Central and Eastern European Countries*, Institute for World Economics (Budapest), February 1999.

[157] Ibid.

[158] M. Szanyi, "Experiences with foreign direct investment in eastern Europe", *Eastern European Economics*, Vol. 36, No. 3, May-June 1998, p. 35.

The high and relatively high-tech branches of industry, consequently, gained ground in those countries where foreign investment was substantial. The share of electrical, optical and transportation equipment in total industrial output increased from nearly 13 per cent to more than 25 per cent in Hungary, from 12 to nearly 17 per cent in Poland, and from 10 to more than 22 per cent in Slovakia during the 1990s. This was in sharp contrast to Bulgaria and Romania, where the share of these branches declined from 10 to 8 per cent and from nearly 14 to 11 per cent, respectively.

Structural changes went hand in hand with impressive developments in labour productivity. Foreign companies introduced western management and paid somewhat higher wages than domestic enterprises, but required higher productivity as well. As a consequence, productivity increased much more rapidly in those countries where foreign investment played a bigger role: Hungary, from one third of the Austrian level in 1991, reached two thirds of it in 1998. In Poland, labour productivity increased from 30 to 50 per cent of the Austrian level, and in the Czech Republic and Slovenia from 40 to 50 per cent, but the Bulgarian and Romanian levels stagnated around 30 per cent of that of Austria.[160]

Volkswagen Werke, Audi, Bayer, Siemens and Henkel, the main investors in central Europe, stepped in rather early. European and American companies also played a role. Thomson, the worldwide number two television tube producer, established firms in Warsaw and is selling its products via its European sales network. Philips transferred part of its battery production from Belgium to Poland, and exports more than half to the European Union. Asea Brown Boveri founded 70 affiliates employing 23,000 employees in the region after 1990. Half of the machine tools the company uses in power plants for the south-east Asian market are produced in central Europe. Fiat integrated its long-established Polish subsidiary into its global network and concentrates the production of the Fiat Uno exclusively in Poland; three quarters of the output are sold to the parent company. The German tire manufacturer, Continental, produces more tires in its Czech branch than in any of its other plants, while basic tire parts (modules) are produced in the Czech Republic and Hungary, then shipped to Germany for assembly.[161] Slovenia has also attracted foreign direct investment into its industrial sector: by the mid-1990s, half of the foreign investment stock was invested in manufacturing, with the biggest share in the auto (14 per cent), paper (10 per cent), and electrical machinery (9 per cent) branches. Leading multinational companies – Renault, Bayer, Henkel, Siemens, Semperit and others – have sought to exploit the low wage level of what is otherwise a well-developed country. Two outstanding projects in Slovenia were Renault's purchase of a 54 per cent share in the Revoz car factory for $54 million, and Danfoss International's investment in the largest Slovenian enterprise, Gorenje GA, with which it jointly established the Biterm Company to produce thermostats in 1994. Characteristically enough, however, the Danish multinational Danfoss did not make the most modern type of thermostat in Slovenia. Research and development also remained in Denmark and "Danfoss does not allow Biterm a lot of initiative in the field of technology and R&D".[162] This attitude is rather common among multinational companies. In February 1991, the German Linde firm bought 52 per cent of the Czech Technopolyn and, in 1995, became the sole owner of the Czech gas, metallurgical and chemical plant. "Since the foreign partner's entry, the subsidiary has ceased to do its own research and development. These activities are carried by the Technical Application Centre and a modern laboratory in Höllriegelskreuth near Munich on a centralized basis…".[163]

Transnational companies have made substantial investments in their east European firms. By the mid-1990s, foreign companies owned 12 per cent of Czech manufacturing firms, but their share of industrial investment was 25 per cent; in Poland and Slovakia, also with 12 per cent ownership in both countries, their share of investment reached 30 per cent and 36 per cent, respectively. In Hungary, the foreign share in industrial investment was nearly 80 per cent.[164]

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[159] A. Krajewska, "Transformation of the Polish economy", *Eastern European Economics,* Vol. 34, No. 1, January-February 1996, p. 15.

[160] M. Landesmann, "Structural change in the transition economies since 1989", paper presented at the UN/ECE conference *From Plan to Market: The Transition Process after Ten Years* (Geneva), 2 May 2000, pp. 11-12, 27.

[161] A. Enzmann, "Investment promotion in the Czech Republic, Hungary and Poland", in J. Bastian (ed.), *The Political Economy of Transition in Central and Eastern Europe* (Aldershot, Ashgate, 1998), pp. 47-48, 58.

[162] M. Svetlicic and M. Rojec, "Biterm d.o.o.", *Eastern European Economics,* Vol. 36, No. 5, September-October 1998, p. 84.

[163] M. Bohatá, "Linde Technopolyn a.s.", *Eastern European Economics,* Vol. 36, No. 4, July-August 1998, p. 95.

One of the best examples of restructuring is Hungary, where a few major greenfield investments have created new and modern factories and industrial branches. General Motors, Ford, Suzuki and Audi have established a previously non-existent car industry in Hungary with $1.3 billion investments (up to 1996), partly producing and partly assembling cars, engines, and parts. Philips, Guardian Glass, IBM and Fuchs Metalwerke, altogether, have made $420 million of greenfield investments for producing electronics parts, glass, and metal products. In 1995, 34 per cent of foreign direct investment was in greenfield projects; in 1998, the proportion was 94 per cent.[165] The single most successful investment was the privatization of the Hungarian light-source producer, Tungsram, which had a 2-3 per cent share of the roughly $12 billion world market, and a 5-6 per cent share of the west European market. The American transnational company, General Electric, acquired 50 per cent of the shares of Tungsram for $150 million in 1990, then virtually the entire company (99.8 per cent) in 1994. General Electric integrated Tungsram into its global operation, invested about $600 million by early 1995, rationalized the company by closing down certain production lines and branch subsidiaries, and concentrating production on mainly high-margin products, including new energy-saving compact fluorescent lamps. In 1994, they started production of a revolutionary new product, Genura, the world's first compact reflector lamp using induction technology. Since 1995, 90 per cent of GE's European output has been concentrated in Hungary, while several newly acquired west European facilities were closed down.

Tungsram's restructuring led to a double-digit annual increase in productivity. The number of employees was reduced from 20,000 to 9,000, and the company spent $30 million annually for retraining and redeployment. Moreover, "this is the only example where a global multinational … decided to concentrate its worldwide R&D capability in a transforming economy in central Europe".[166] Out of the eight major research programmes sponsored by GE worldwide, four are at GE's Nela Park headquarters in Cleveland, the other four in Budapest. About half of GE's professional R&D personnel work in Hungary. Tungsram became the world's largest producer of light-sources and, using GE's commercial network, sells 40 per cent of its output in western Europe, 30 per cent in the Middle East and Asia, another 15-20 per cent in the United States, and only 10 per cent in Hungary and eastern Europe. Its export earnings were nearly $300 million in 1994, making Tungsram Hungary's largest industrial exporter.[167]

Transnational car producers are among the largest investors in the region. Volkswagen Werke, with the largest Czech investment, Fiat, Renault, and General Motors are the leaders, but Daewoo and Suzuki are also present. Toyota and Isuzu are preparing to invest in Poland. In five years, Volkswagen may replace the Russian AvtoVAZ (Lada) company as market leader. According to the Economist Intelligence Unit, car production in central and eastern Europe may increase by 30 per cent and reach 2.88 million cars by 2005. Three quarters of that output should come from the Czech Republic, Poland and Russia, and 60 per cent seems likely to be sold in Poland and Russia.[168]

As a result of creating internationally competitive industrial sectors, the transnational companies have started to play an important role in some of the countries of the region. In western Europe their role is well represented by the fact that one third of American exports and two thirds of imports were intra-firm transactions by the late 1990s. One third of the British, French and Dutch industrial output is produced by transnational companies, and they financed 25 to 40 per cent of the countries' research and development expenditures. Hungary, at the same level as Ireland, is far more "globalized". In these two countries, foreign affiliates produce more than two thirds of industrial output and finance roughly 70 per cent of research and development expenditures.[169]

Hungary's exports, as a consequence, increased by 238 per cent between 1989 and 1999, and by the second half of the 1990s, more than 45 per cent of the country's exports consisted of machinery and transport equipment. Hungary was the only country in the region, which significantly increased the share of machinery in its exports (from 26 per cent in 1990) during the 1990s. Although the Hungarian performance in this respect is quite unique, other central European countries are showing similar indications of the progress of restructuring: Poland increased its exports by 243 per cent, the Czech Republic by 223 per cent, Slovakia by 330 per cent. Slovenian exports more than doubled between 1989 and 1997. In all of these cases, machinery and transport equipment represented between 20 to 35 per cent of total exports.

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[164] M. Szanyi, "Experience with foreign direct investment in eastern Europe", *Eastern European Economics*, Vol. 36, No. 3, May-June 1998, p. 36.

[165] World Bank, *Transition. Newsletter About Reforming Economies*, Vol. 10, No. 5 (Washington, D.C.), October 1999, p. 7.

[166] P. Marer and V. Mabert, "GE acquires and restructures Tungsram: the first six years (1990-1995)", *Performance of Privatized Enterprises: Corporate Governance, Restructuring and Profitability* (OECD, Paris, 1996).

[167] Ibid.

[168] Economist Intelligence Unit, *The Automotive Industry of Central and Eastern Europe: Perspective to 2005* (London), January 2000.

[169] OECD, *Measuring Globalization. The Role of Multinationals in OECD Economies* (Paris), 1999.

These export developments occurred as part of a rather difficult regional restructuring of foreign trade. About 40 per cent to 75 per cent of the foreign trade of the central and east European countries was with the Soviet Bloc before 1989. The collapse of Comecon and the Soviet Union drastically decreased the share of the eastern markets. The countries of the region turned towards Europe and, as early as 1995, the European Union became the main trading partner of the central European countries: Poland, Hungary, the Czech Republic and Slovakia sold 63, 51, 46 and 38 per cent, respectively, of their export products in the European Union. Not surprisingly, 50 to 60 per cent of their European exports still consist of primary products, i.e. food, beverages, unprocessed raw materials, fuels and basic manufactures, mostly intermediate goods.[170]

Large foreign investments have thus had a significant effect in some of the central European economies. They have generated the growth of domestic business, which is itself an important contributor to economic growth, especially in Poland. Small domestic businesses, however, are rarely able to become technology leaders. Various agreements between local governments and transnationals sometimes contain clauses stipulating compulsory reinvestment of part of the profits and mandatory use of domestic products and subcontractors. Big transnational business has thus often initiated small local business activities. Sometimes, as in the case of Volkswagen's Czech investment, various suppliers of VW have also moved to the Czech Republic. Transnational companies play a significant positive role in central European restructuring and in sustaining growth.

Russia, the rest of the CIS and most of the Balkan countries have made minimal progress in restructuring. Foreign direct investment is minimal and has mostly gone into the extractive branches of oil, gas and raw materials. Consequently, exports are not the main vehicle of economic development as in central Europe. Moreover, a sort of dual economy has tended to emerge: only the extractive industries belong to the dynamic export sector – with or without foreign investments – and generate one quarter of the GDP in Russia, while the processing industries produce non-competitive products for the domestic market. In this part of eastern Europe, restructuring, in terms of producing competitive modern products based on new technology, has hardly made any advance. Transnationals are present but do not trigger any significant spin-off effects and, in some cases, remain a foreign enclave, extracting and exporting critical raw materials, without developing modern processing industries and export branches, similar to the early twentieth century situation in Romania, Serbia and some other countries. This area, consequently, has been unable to adjust to the late twentieth century technological revolution and has remained in a peripheral structural crisis.

In those central European countries where significant foreign direct investment has assisted technological-structural adjustment, and the domestic institutional, legal and social environment, as well as general attitudes were appropriate for the generation of spin-off effects, economic transformation has been paving the way to sustained growth and catching up with the west. These countries have also become members of NATO and are candidates for European Union membership. These decisive institutional changes should support progress towards an equal partnership with the west and along the road from the periphery to the core of Europe. Two thirds of this large region, however, have taken only the very first steps forward, and still cannot meet even the basic requirements of transformation demanded by the communications revolution and the twenty-first century. They remain seemingly outside the integrating continent, behind a new "poverty curtain" as a reduced, deeply disappointed and explosive periphery of Europe.

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[170] H. Hoen, *The Transformation of Economic Systems in Central Europe* (Cheltenham, Edward Elgar, 1998), pp. 136-139.

Discussion of chapter 2

2.A Erik Berglöf

This stimulating and thought-provoking paper spans a broad range of issues and provides a rich historical perspective on development in central and eastern Europe. My comments will focus on three questions: What are the main lessons from the "first transition" from plan to market? What do we know about the "second transition" from regime change to sustained growth, and in particular about the role of foreign direct investment in this process? What is the role of outside forces, in particular the European Union, in the second transition?

Before addressing these questions it is useful to get a sense of where these countries are at the moment. Despite all the measurement problems one could probably say that sustainable growth is rare in the region and no country is on the "catching-up" growth path yet. Still there is considerable variation. To explain this variation, people have pointed to either initial conditions or policies. The literature has increasingly emphasized initial conditions, and the available evidence does not allow strong statements regarding the superiority of certain policies over others. In this sense, this paper is similar in spirit to the literature. The author emphasizes the importance of initial conditions and the historical backwardness of the region. The income gap between central and western Europe has existed for over a century; the region has never had modern market institutions; and many countries are landlocked, a condition leading to inwardly-oriented policies.

The tone of this paper is very much that of the new "geographic determinism" where geographical location determines the possibilities for growth and prosperity. The author downplays the variation among these countries earlier in the century between, for example, Czechoslovakia and Romania, and more recently between the transition frontrunners in central and eastern Europe and the laggards in the CIS. He also emphasizes that the transformation recession started much earlier than commonly believed, and that it was not only caused by socialism: external shocks also contributed, namely the oil crises of the 1970s and the restrictions on the transfer of technology by the west.

While the author emphasizes initial conditions, he pays a great deal of attention to policy mistakes. He obviously cares about policy, and we want to believe that policy matters. In my interpretation of his argument, I suggest some implications that are rather close to the consensus emerging in the literature on transition. First of all, the prescription of the "Washington Consensus" to stabilize, liberalize and privatize is too narrow. It is also too simplistic: stabilization, while it may be urgent, is a battle that has to be fought over many years. Liberalization can also be achieved in different ways and the path chosen can often be questioned, as for example in Russia. As regards privatization, we know now that it matters how and when it is done. General lessons also include: that the state has an important role in providing the conditions for business and growth in general; that institutions, and particularly enforcement institutions, are crucial; and that distribution matters, not only because we care about the poor but also because we want reforms to be sustained over time. The political economy of transition is critical: how are constituencies built, how is legitimacy achieved, and how do we build a system that generates the right policies? As a relative newcomer to the debate, if I were to summarize the experience from the first transition in one lesson, it is that optimal policies cannot be thought of independently of how they can be implemented and sustained.

If political economy is the main lesson from the first transition, the chief insight so far from the second transition is the importance of enforcement for staying a course of sustainable and high rates of growth. By now many of the countries in the region have good legal frameworks and the necessary institutions, but the effectiveness and enforcement of law are still lagging. One fundamental source of the lack of enforcement is the lack of legitimacy of legislators, legal texts, courts and enforcement agencies. This is not true in all, but in most of the countries. The lesson that comes out of the transition experience for many countries is that the legitimacy of institutions and legal documents can only be earned through the democratic process. As we see from the experience of Russia, for example, legal reform will ultimately be pushed only by the middle class and not by the initial winners in the "first transition". In other words, the prospects for the second transition are closely tied to how the first transition was achieved.

The author's discussion of the role of FDI during the second transition is interesting. As we know, the importance of FDI varies a lot across countries. We have to be careful about the direction of causality between foreign direct investment and sustainable growth. The influence goes both ways, but what brings in foreign direct investment is the narrowing of the risk premium; and the risk premium is reduced by enforcement. That is why enforcement is the key. Of course, FDI is not always beneficial. A recent study in Russia shows that spillovers from foreign direct investment, while probably positive on the whole, vary greatly across regions in Russia, in both size and sign.[171] In the regions where the transition environment is poor and where the transition process has not advanced very far, spillovers are much smaller and sometimes even negative. In other words, the institutional environment is crucial both for bringing in foreign investment and for generating positive spillovers.

This brings me to the author's discussion of the centre and the periphery. Here the paper is inspired by traditional Marxist theory and the new economic geography where integration leads to divergence by benefiting big economies more than smaller ones. This effect comes from agglomeration economies and increasing returns to scale. But recent work shows that smaller countries can gain in absolute terms – it is not a zero-sum game – and that lowering trade barriers can lead to innovation and growth. Transition reduces risk, which leads to foreign direct investment in the productive sector; the terms of trade improve; the unproductive sector is then crowded out which leads to better terms of trade, more FDI and so on. Bringing about this virtuous circle of sustainable growth is critical for the second transition.

Finally, on the policies for catching up, the paper reveals a bias in favour of innovation strategies. The available evidence does not necessarily suggest that innovation is better than imitation. It is not clear that these countries have a choice, but if they do, imitation may in fact be preferable. Whether this is true or not, the choice of strategy will have implications for the supporting institutions. What kind of financial system do they need? What type of industrial organization? What type of labour markets? What is the role of the state in the different growth strategies? More thinking is needed in the formulation of growth strategies for these countries.

Finally, what can outsiders do? The European Union has played a very important role in some of the countries in the region as an outside influence in helping to break political and financial constraints to reform, and to improve enforcement. The larger the reward of joining the Union is perceived to be, and the closer in time it is envisaged, the stronger such leverage will be. The role of the European Union as an outside anchor is much more important in the second stage of transition, when enforcement is the key. (Maybe it could also play this role in the CIS.) But, in this regard, it is not clear that the EU is taking its responsibility seriously enough. By delaying the date for accession still further, by creating uncertainty about when and whether it will happen, and by diluting the meaning of membership, the EU runs the risk of losing its outside leverage and missing out on a unique opportunity to support the transition process.

2.B Jan Svejnar

In the interest of full disclosure I should mention that I am also affiliated to the Centre for Economic Research and Graduate Education – Charles University in Prague, so my perspective is idiosyncratic in the sense that it comes both from the west and the east. Turning to the paper I shall just briefly summarize the main points I want to address. There are basically two parts to the paper that, by the way, I greatly recommend to everybody. It is very thought-provoking, and very thoughtful as well in terms of its approach. The first part is a critique of the laissez-faire concept behind the central and east European and CIS transformation and the second part chronicles developments in the 1990s. The first part focuses on the fact that the process, in the argument of the author, does not end with a systemic change, that there is a need to respond to the challenges of the technological revolution, and that growth is not an automatic outcome of marketization. I will focus on that part plus the first part of the second section which deals with the fact that recession is a continuation of a longer trend. The very last part is one with which I fully agree and so given the time constraint I will not go into it here, but it focuses on the need for the multinational corporations entering the transition economies, on the valuable contributions that they have made – very nicely documented in the paper – and then it talks about the relative success of central Europe and the relative failure elsewhere, particularly in the Balkans and further east.

The main question of the paper, or at least the main point that I want to discuss, is whether the relative success of central and eastern Europe, particularly central Europe as portrayed in the paper, is not in fact largely due to the very laissez-faire approach which the paper criticizes. So what is the critique of laissez-faire? Laissez-faire is defined here as the implicit assumption that the restoration of a free market system in private ownership will solve all problems. It also advocates a fast as opposed to a slower approach to reform and argues that the GDP decline at the start of the transition is a healthy restructuring process rather than part of a long recession, which is what the paper disputes. So let's talk a little bit about the explanation of the GDP decline that Ivan Berend presents. As he argues, it is not a consequence of central planning or state socialism but rather a continuation of an historical trend that started in the nineteenth century. Central and eastern Europe in fact failed to develop through laissez-faire and export-oriented policies before the First World War. What that meant was that after the war there was an upsurge of economic nationalism, protectionism, import substitution, state intervention and some planning. Central planning, which came after the Second World War, is thus only an extreme version of this earlier economic nationalism which was an attempt both to avoid a hopeless competition with the west and to reach western levels of income per head. From this argument, the logical conclusion is that central and eastern Europe cannot simply reject central planning and return to some kind of normal market system, because in fact it never previously succeeded in the normal market system. And the data presented show that central and eastern Europe, in terms of its GDP, has remained at a constant level of about 40 to 45 per cent of the GDP of the west since the 1870s.

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[171] K. Kozlov, N. Melentieva, N. Ponomareva and K. Yudaeva, "Does foreign ownership matter? Russian experience," Center for Economic and Financial Research (Moscow), 2000, mimeo.

The continuing decline in the 1990s, it is argued, had already started in the 1970s, following the oil shocks, the deteriorating terms of trade and rising foreign debt, and in this respect central and eastern Europe are similar to other peripheral countries, in particular Latin America. So this is a larger phenomenon that can be seen all around the world. The structural change that occurs in these countries brings destruction without creation, to paraphrase Schumpeter. So we have a situation where central and eastern Europe was protected since the First World War and by 1989 was unable to compete because it was so protected. There followed a heavy dose of policy mistakes in the 1990s and the author describes devaluation as being a major problem which leads to the need for state regulation and intervention, together with a mixed economy containing an efficient state sector. So that is the author's prescription of what should have been done – regulation, a mixed economy and an efficient state sector. Instead of that, what we are seeing is the collapse of old companies, mass unemployment, and a decline in living standards. There is a real interest in the discussion of the problems of Russia and the Balkans, which, presumably, have not undertaken the technological and structural transformation that was needed in order to perform much better.

So let me start with my assessment of what, as I have said, is really a very provocative and thought-provoking piece. The first part starts with a very good point, namely, that just opening up, privatizing and removing the state, will not turn central and eastern Europe or the CIS into the European Union. That is a thought-provoking start and I shall try to be thought-provoking as well. I think that the paper, while making these good points, caricatures what most proponents have argued and continue to argue. I think that the laissez-faire policies, as defined here, were indeed stressed, but they were stressed as important steps in a very complex situation. I think a good way to think about this is that when you are modelling something you need to abstract, to focus on the most important issues and not talk immediately about everything else. There is a problem if some people accept this simplification as a complete description and, indeed, a complete description of what to do. But the discussions which proceeded in the early 1990s had much broader ramifications. Indeed the question, I would say, was what to emphasize given the complexity of the situation. And this is where the emphasis on prices being distorted and on the need for opening up trade and "importing" world prices for tradeables was stressed. The fact that there was virtually complete state ownership naturally focused attention on privatization. And the omnipresence of state regulation in the form of central planning also led to emphasis on reducing the role of the state. But I think it is fair to say that most proponents of the laissez-faire approach also advocated the need for a new legal system, the development of institutions and of corporate governance. But these are much harder to implement and they take time. Countries have shown that they can liberalize overnight by letting prices go. Nobody has been able to develop a new legal system overnight. And, moreover, there was some reluctance to do so – I think the stress in the paper is very important in that respect.

Let me turn now to some specific points. One of them is the recent GDP decline as a historical phenomenon. I think table 2.1.1, which gives the constant long-term GDP of eastern relative to western Europe at 40-45 per cent, is really a very nice reminder of what is going on, but I think it would be good to develop the point even further: is the west really such a homogeneous group, how have these countries changed over time, and so on. But I think there are also points that go against Berend's argument. First of all there has been substantial industrialization all over central and eastern Europe during the last 50 years. There were important regional differences. There were some regions that were very developed – Czechoslovakia, in particular the Czech lands, was the most industrialized country on the eve of the Second World War, and it became much less developed over time while Slovakia and others advanced dramatically. So the region has many specific features and the constancy of the regional average over time hides a lot of important variations. The rapid GDP decline in the 1990s was much more precipitous than the slowdown in the 1970s and 1980s. Among the underlying factors were the isolation from the world economy, the extent of state ownership and control, and the lack of marketization, which was much greater under communism than during the period of, say, 1870 to 1948. The transformation shock is clearly a phenomenon per se that needs to be explained. My argument here is that although the long-term historical interpretation has some validity and should be explored, it has limited power in explaining what happened in the early 1990s.

Let me say a few words about the historical similarity to the other peripheral countries. The argument that this peripheral phenomenon of structural change bringing destruction without creation is in fact general. Again there is something to it, but I don't think it is quite so clear cut. If you look at Latin America, in particular, since that is given as an example, it is true that economic growth suffered in the 1980s because of the debt crisis, but many individual countries had significant periods of rapid growth in the 1960s, the 1970s and the 1990s. Analysis suggests these variations, both of failure and success, do not reflect deterministic, long-term phenomena but are very much policy induced. So there is room for hope in the sense that policies can make a lot of difference. Some countries advanced very dramatically, Chile being a good example. We have done much work in the Davidson Institute with individual firms and industries and there have certainly been both firms and industries that have not been destroyed but have developed to world standards. Most recently, of course, the revolutions in IT and Telecom are good examples of developments which have not passed these enterprises and industries by. FDI has been entering Latin America in a big way, although, as usual it is very highly concentrated – mostly in Brazil, Mexico and Argentina, just as in central and eastern Europe the major share has gone to Hungary, Poland and the Czech Republic. So I think that the similarity is there, but it is a similarity which indicates a lot of creation, not just destruction.

Finally, of course, there are examples from Asia, countries such as Japan, the Republic of Korea and Taiwan, where the gap with the west has been closed or is closing. Again, the rule is not one of ironclad historical determinism.

Let me move on to the argument that central and eastern Europe could not compete in 1989 and that mistaken devaluations and other policy mistakes occurred in 1989, 1990 and thereafter. I think that here the evidence as well as theory points to the contrary. Many teams from the IMF, the World Bank and elsewhere, went to the region in 1989-1990 and they basically said that there was no way that these countries could compete; yet, with the help of devaluation, two to three years later these countries were exporting very effectively to the countries of western Europe, to the point where the latter were invoking safeguards and anti-dumping procedures. So, in the short run, the devaluations helped considerably by generating exports to highly competitive areas.

Could central and eastern Europe have done better with an efficient state sector implementing effective regulations and policies? In theory, yes; but in practice, and at that time, probably not. An efficient state sector implementing optimal policies is what everybody wants, but the problem is that it is very hard to get. It is easy to argue for it in the abstract, but it is difficult to find really good examples of long-term, consistent realization of this ideal. By 1989 central planning had run out of steam in central and eastern Europe – the staff in all the Planning Ministries were not at all skilled in implementing efficient regulation and the enabling policies for market economies. Enterprises were inefficient, and sectors, such as banking where the state in fact remained as owner and significant regulator in the 1990s, were not doing well. There were repeated major bailouts of banks in Hungary from the 1980s and, the Czech Republic is going through a banking crisis at present. The real issue is whether a more active role for the state was actually feasible in the early 1990s.

Let me conclude by saying that I think Ivan Berend's paper is very thought-provoking and that it provides many ideas which should be examined more closely. I think the paper itself, as well as the evidence we have from other sources, indicates that policies can make a difference and that many of the laissez-faire policies, as the paper indicates, have in fact attracted foreign direct investment to central Europe. Central Europe has done much better than some of the other regions, after the initial shocks and some mistaken policies, by using market forces rather than trying to go against them. It did so by complementing market forces judiciously with supporting policies, especially in the area of legal systems and the regulation of financial markets, and then by moving on to the next generation of enabling policies mentioned by Erik Berglöf.

2.C Paul J.J. Welfens

Ivan Berend's paper consists of three main parts: first he takes a critical look at the expectations of influential western advisers and international organizations in the early process of transformation. Secondly he argues that the transition recession was part of a more long-term economic decline. Finally, long-term economic growth, in his view, cannot be achieved without a combination of large inflows of FDI and adequate national policies. At bottom, he finds that post-socialist eastern Europe is characterized by economic divergence and that there is no reason to anticipate rapid upward economic convergence across eastern Europe. This analysis implicitly raises the question whether we really understand why some post-socialist countries have been relatively successful in opening up their economies, restructuring and institutional reform while others have suffered large transformation failures.

Besides western consultants engaged in post-socialist countries the main outside actors in eastern Europe were the IMF and EBRD, and to a lesser extent the EU and OECD. In the mid-1990s the latter dissolved the transition research group headed by Dr. Zecchini whose team contributed considerably to analysing the problems of eastern Europe's transformation. It is unclear why the OECD dissolved this research group long before even half of the 27 transition economies had fully achieved transformation and sustained growth. Strangely enough, Russia – one of the most important transition economies – is now covered by the Big-5 research group of the OECD; it is almost impossible to see what the five big countries, Russia, Brazil, India, Indonesia and China, have in common except that they all have an "i" in their country name. In a period of important and difficult global and regional challenges, part of the OECD has demonstrated a dangerous degree of incompetence; the transformation research group should be re-established.

In the west research on transformation is undertaken by individual researchers and various research institutions, the Vienna Institute for Comparative Economic Studies, the UN/ECE, EBRD and the BOFIT research centre of the Bank of Finland being the leading research groups. However, the really important and influential institutions in eastern Europe are essentially the IMF and the World Bank, the latter much less than the former.

Ivan Berend is right in pointing out the popular misperceptions in western Europe and the United States about the nature of transformation and the speed at which transforming countries might achieve broad restructuring and successful catching up with western Europe. Since I largely agree with the author's analysis I would like to add some additional reflections.

There are several reasons for the apparent failure of many policy advisers to come to grips with the problems of transition.

Many influential policy advisers from the west lacked any comprehensive knowledge about socialist countries, and experience with Latin American or Asian countries turned out to be of rather limited relevance. Knowledge of eastern Europe, however, is required because the socialist command economy had created particular distortions in the east European countries. The existence of inherited distortions is in stark contrast to the standard textbook analysis, e.g. of the case of a closed economy with competition and full employment (plus an implicitly assumed government and a functional rule of law which allows markets in the tradeables and non-tradeables sector to work, i.e. contracts to be fulfilled) which is then opened to trade. Transformation, however, means that the initial situation was one of monopoly in many sectors, excess demand in goods and factor markets and hidden unemployment, and that all transformation efforts, plus the opening up of the economy, have to start in a very distorted environment.

Economists often conduct research on the basis of a given exogenous political system, but in eastern Europe economic transformation was taking place simultaneously with major political changes, including the formation of new political parties which had little experience and enjoyed only weak credibility in the initial transition stage. The combination of fragile political systems with economic hardship is a difficult starting point for establishing a consistent and functional economic system and the basis for sustained growth. While public choice analysis offers some useful starting points for understanding the interdependency problems of economic and political change, economists have not developed a tradition of combining the available theoretical islands (e.g. public choice, macroeconomics and input-output analysis) in economics or of conducting interdisciplinary projects – except perhaps for some environmental projects – which could have been quite useful in eastern Europe.

Transformation to a new economic system is a sharp change of institutional and policy regimes which devalues accumulated knowledge and "social capital" (the value of adapted networks) while, at the same time, building a new set of consistent and functional institutions takes time. While economic textbooks are basically dealing with small marginal changes in various models, the challenge of systemic transformation has been the combination of many large changes for which traditional economics offers inadequate models. Indeed, drawing an analogy from classical physics with its focus on relatively slow movements and Einstein's physics for fast moving elements, it might be argued that a special economic theory is needed for the case of systemic transformation and other radical and comprehensive changes in an economic system. Neoclassical equilibrium analysis is largely inadequate for analysing disequilibria in a situation of political instability.

Transformation cannot survive politically if there is no sustained economic growth that allows workers to be compensated for the increase in job uncertainty and the fear of unemployment. In a portfolio-theoretical perspective it is clear that the switch from stable conditions with socialist poverty to the new market world, with a combination of economic uncertainty and high potential prosperity, requires a critical minimum rate of growth if individuals are not to suffer a decline of utility.

It is not only astonishing that many economists have failed to understand the problems of east European transition, it is also frustrating that economics has not developed adequate filters that would quickly eliminate faulty analysis – part of the problem, of course, is that alternative theories are often difficult to reject on the basis of empirical analysis simply because the available data are too limited to allow broad time series research. Even more surprising is that 10 years after the transformation began we still do not have a broad consensus among the leading international organizations with respect to explaining the successes and failures among the 27 transforming economies. While the IMF has a strategic role for the global financial and trading system – despite sharp criticism from certain economists – the IMF has failed in regional crisis management and in the transformational strategies applied in the former Soviet Union.

Explaining success cases versus transition failures

Ivan Berend points out that economic restructuring is important for growth and that large inflows of foreign direct investment can also play a positive role. Indeed, both elements are often intertwined. Even when foreign investors have bought into markets in eastern Europe in the first transition stage this often stimulated outsourcing and thereby restructuring in the respective domestic firms as well as forward and backward linkages to other industries. However, as long as there is no political stability, multinational companies will have little incentive for vertical foreign direct investment, so that the dominance of buying into markets is not surprising, even over a longer time span, if political stability cannot be achieved. An important issue is the extent to which the dynamics of trade and FDI can translate into long-term economic growth. In the following I will draw upon some previous analysis.[172]

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[172] P. Welfens, *Eastern EU Enlargement and the Russian Transformation Crisis* (Heidelberg and New York, Springer, 1999); P. Welfens and E. Gavrilenkov (eds.), *Restructuring, Stabilizing and Modernizing the New Russia* (Heidelberg and New York, Springer, 2000).

On the basis of textbook models and empirical analysis it is expected that economic opening up and growing trade will contribute to output growth. The expansion of the tradeables sector is crucial because productivity growth in the tradeables sector typically is higher than in the non-tradeables sector so that the relative price of tradeables in terms of non-tradeables will rise with economic development and per capita income (the Balassa-Samuelson hypothesis). As regards the link between trade and growth, a strong impulse comes from rising exports of manufactured goods, as is argued by T. Ito,[173] who, however, does not give any explanation for his argument and findings – his main finding is that Indonesia and Nigeria both had a share of manufactures in total export earnings of about 1 per cent in 1975, but by 1992 the share had risen to 48 per cent in Indonesia, where per capita GDP surpassed Nigeria's in the 1980s, whereas the latter's share remained almost unchanged.

Learning by exporting hypothesis

I want to introduce here some ideas about the link between export growth, productivity gains and economic growth. Economic opening up will normally stimulate economic specialization in line with comparative economic advantage, a development which should raise economic welfare as consumption can be increased. This standard textbook argument, however, does not explain why rising exports of manufacturing products are associated with relatively large productivity gains. Six elements appear to be important for this link (see chart 2.C.1):

- Manufacturing production requires the combination of inputs from various suppliers – buying from the market – and value added by the respective firm in the export sector. Learning to organize a complex production process with a focus on producing for world markets generates important know-how which can also be applied in other sectors. Moreover, there should be feedback effects on domestic suppliers in the sense that firms looking for competitive domestic suppliers (and for imported inputs) will push for restructuring and modernization among prospective suppliers. This can generate network effects in the sense that if more firms are familiar with the grammar and syntax of the market economy language, the scope of market transactions can be increased;
- Manufacturing industry offers many opportunities for product differentiation and imitation, which thus create possibilities for raising value added over time; in the export sector there is also continual change in the structure of demand which stimulates learning, flexibility and structural change;
- Exporting manufactured products naturally encourages looking for cheap foreign inputs and thereby helps to transfer foreign technology via imported intermediate products. Productivity gains can often be achieved by intelligent importing. Singapore and Hong Kong are well-known examples in this respect;
- Exports of manufactured products will be stimulated if neighbouring countries also engage in export promotion and thereby stimulate economic growth. Following the logic of the *gravity equation*, which emphasizes that the importance of economic geography, the simultaneous liberalization of trade in neighbouring countries can be expected to provide a greater stimulus to economic growth than isolated liberalization;
- Exporting manufactured products establishes contacts with potential foreign investors in the exporter's industry who may acquire competitive firms or engage in greenfield investment in the long term. Since foreign investors typically enjoy technological advantages and produce a broader variety of products in various subsidiaries, they will often find it relatively easy to define an efficient technological graduation strategy for the new subsidiary;
- Finally, there is a well-known aspect which should be modified in an important way. The (manufacturing) tradeables sector is quite competitive so that inefficient specialization will result in high losses and bankruptcy. The pressure of world market competition thus helps domestic producers to avoid the trap of inefficient specialization with little or no productivity gains. This in turn could stimulate FDI inflows because foreign investors will anticipate that a high degree of openness in manufacturing industry will reduce the risk of inconsistent government intervention.

The above reasoning is consistent with the empirical findings of Sachs and Warner[174] that natural resource abundance has a negative effect on growth. In their convergence model the hypothesis is that the lower the income level the higher is the growth rate. The growth rate is influenced by the gap between the equilibrium income level and current income, the equilibrium income level being affected by both structural variables and policy. The policy variables include openness to trade, market efficiency and the national savings rate.

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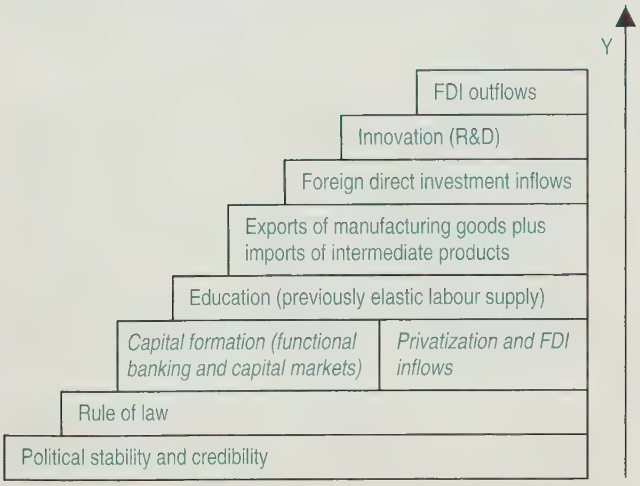
[173] T. Ito, "What can developing countries learn from east Asia's economic growth?", in B. Pleskovic and J. Stiglitz (eds.), *Annual World Bank Conference on Development Economics*, World Bank (Washington, D.C.), 1997, pp. 139-166.

[174] J. Sachs and A. Warner, "Economic reform and the process of global integration", *Brookings Papers on Economic Activity*, 1, Brookings Institution (Washington, D.C.), 1995; J. Sachs, "Sources of slow growth in African economics, Harvard University, *HIID Development Paper* (Cambridge, MA), 1996.

CHART 2.C.1

Requirements for catching up
(Y=per capita GDP)


Y
FDI outflows
Innovation (R&D)
Foreign direct investment inflows
Exports of manufacturing goods plus imports of intermediate products
Education (previously elastic labour supply)
Capital formation (functional banking and capital markets)
Privatization and FDI inflows
Rule of law
Political stability and credibility

Source: Author's presentation.

Lessons from Asia

The Asian NICs successfully combined export expansion and domestic growth after 1960. Outward-oriented economic policies were often combined with restrictions on imports and investment inflows, although long-term international subcontracting in the Republic of Korea and other Asian countries was equivalent to inflows of foreign investment. These inflows increased in the 1980s and 1990s. High savings rates and an elastic labour supply from agriculture supported both the growth of industry and exports.

In several studies of Singapore, the Republic of Korea and Taiwan – for the 1970s and 1980s – Young[175] along with Krugman[176] and Kim and Lau[177] have argued that the Asian NICs' rapid growth is mainly attributable to factor accumulation rather than a miracle. The basic message of these studies is that total factor productivity growth has played only a minor role in Asia's economic growth and, therefore, the region's high rate of growth will not be sustainable once there is no longer an elastic supply of excess labour from agriculture.

However, as emphasized by Ito, the studies of Sarel[178] and Bosworth and Collins,[179] who focus on the more recent decades – the 1980s and 1990s – have found rather high estimates for total factor productivity growth in Indonesia, Malaysia and Thailand and higher estimates for the Republic of Korea, Singapore and Taiwan. So technological progress may depend on sequencing and the stage of economic development. Asia, Singapore, Thailand and Indonesia were able to attract large FDI inflows in the 1980s and 1990s; in the 1990s Taiwan and the Republic of Korea also increasingly attracted FDI inflows while becoming successful foreign investors themselves. According to Ito, stages of development and the extent of economic catching up should be distinguished (a modified Rostow approach).

Applying this reasoning to Russia and other transforming economies, successful catching up will depend upon a prudent sequence of growth-enhancing steps which must include adequate policy impulses. Achieving a sustained growth of manufactured exports appears to be a key element for catching up in the medium term. As output per capita starts to increase, the opportunities to produce and export a diversified range of products, including products based on economies of scale, should lay the ground for raising profits, increasing R&D expenditures (relative to value added), and for skill-intensive export expansion in the next stage of growth.

As regards export expansion and sustained economic growth, respectively, the Asian NICs' progress is partly in line with the new growth theory,[180] which emphasizes the role of economies of scale and human capital formation. To the extent that foreign investors invest more in the training of employees than domestic firms, FDI may have a greater effect on growth than the simpler models of capital accumulation would suggest.

Impediments to economic catching up in Russia

The most basic steps towards a better position in the per capita income league had not been realized in Russia in the 1990s. According to a global survey by the World Bank, policy instability and lack of the rule of law (the problems of crime and corruption) – both of which may be summarized under political stability and lack of credibility – are serious impediments to foreign investment, as are high and unclear tax laws.

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[175] A. Young, "A tale of two cities: factor accumulation and technological change in Hong Kong and Singapore", *NBER Macroeconomic Annual 1992* (Cambridge, MA, MIT Press, 1992); "Lessons from east Asian NICs: a contrarian view", *European Economic Review* Vol. 38 Nos. 3-4, 1994, pp. 964-973; "The tyranny of numbers: confronting the statistical realities of the east Asian growth experience", *Quarterly Journal of Economics*, Vol. 110, No. 3, 1995, pp. 641-680.

[176] P. Krugman, "The myth of Asia's miracle", *Foreign Affairs*, November-December 1994, pp. 62-78.

[177] J.-I. Kim and L. Lau, "The sources of economic growth of the east Asian newly industrialized countries", *Journal of Japanese and International Economies*, Vol. 8, No. 3, 1994, pp. 235-271.

[178] M. Sarel, *Growth in East Asia: What We Can and What We Cannot Infer From It*, IMF Working Paper WP/95/98 (Washington, D.C.), July 1995; "Growth and productivity in ASEAN economies", paper presented at a conference sponsored by the IMF on macroeconomic issues facing ASEAN countries, 6-8 November 1996, Jakarta.

[179] B. Bosworth and S. Collins, "Economic growth in east Asia: accumulation versus assimilation", *Brookings Papers on Economic Activity*, 2, Brookings Institution (Washington, D.C.), 1996.

[180] P. Romer, "Increasing returns and long-run growth", *Journal of Political Economy*, No. 98, 1986, pp. 71-102 and "Endogenous technological change", *Journal of Political Economy*, No. 94, 1990, pp. 1002-1037.

Most FDI in eastern Europe has been found to be market seeking so that cost motives are not of prime importance at first sight. However, an EBRD survey has shown that the type of FDI varies strongly according to the host country's progress in economic transition. FDI projects in the post-socialist countries which are more advanced in the transition process show three characteristics:[181]

- they are more export oriented;
- they are more integrated into the foreign parent's multinational production process;
- they are more likely to exploit the host country's comparative advantage.

Internal divergence and crime

Economics rarely deals with problems of crime, the literature on the shadow economy being the largest body of such research.[182] Widespread crime not only undermines the rule of law but it also discourages the use of markets and contracts, and weakens growth by stimulating emigration and reducing investment.

High rates of long-term unemployment and large income differences encourage criminality and violence. In a portfolio-theoretical perspective all individuals suffer a loss of utility since consumers face a new dimension of uncertainty, and wealthy individuals will increase their expenditures on security to counter the threat of extortion and abduction by the Mafia. Most former socialist countries suffer from high levels of unemployment and large income differences. The Gini coefficient has increased dramatically in some countries, most noticeably in Russia and Ukraine. In some ex-CMEA countries crime has increased considerably, and there is no doubt that some countries have become the centre of international Mafia activities as well. These serious problems at the national and international level point to the need to achieve not only transformation but also sustained growth to create full employment and social cohesion. In principle, the model of the social market economy indeed has not become obsolete simply because some disciples of the Chicago school consider social policies to be inadequate or because globalization has made taxation, and thus the financing of social expenditures, more difficult; however, what types of social policy and what would be an adequate level of financing is an open question. Beyond the topics of crime and violence, the social market economy model also has a role to play in all the European economies (east and west) because people's preferences consider government social policies to be rather important; preferences in the United States are obviously different in this respect.

Prospects for convergence in the former CMEA area?

High and sustained rates of growth are crucial for sustaining the transformation. High investment-GDP ratios, a high marginal product of capital, growth-enhancing trade dynamics and the accumulation of R&D and human capital are all crucial for high rates of growth. Governments facing problems of fiscal consolidation and capital flight are unlikely to be able to support adequate research and development expenditures in the business community or to finance high levels of expenditures on education; if such unfavourable developments are combined with a peripheral geographical location, the prospects for high growth rates are unfavourable. Poland, Hungary, the Czech Republic, Slovenia and the Baltic countries face relatively favourable medium-term growth prospects, but most of the other transition economies can be expected to grow rather slowly.

The Pantarhei III model for Germany has shown that the output multiplier for raising the R&D capital stock is much higher than for fixed investment, mainly because it leads to a more rapid growth of exports. This suggests – in line with the new growth theory – that in the course of economic catching up, the role of R&D expenditures (and of human capital formation) will become increasingly important for central Europe. Macro-models based on a bottom-up approach, i.e. with an input-output submodel, are needed for the east European economies in order to assess the extent to which this hypothesis can be corroborated.

Should eastern Europe be unable to avoid long-term divergence from western Europe, there is a considerable risk that large-scale migration and political conflicts will sustain further regional imbalances which will undermine growth and prosperity in the whole of Europe. International organizations, such as the IMF, EBRD and EU, should act positively to avoid such a divergence in eastern Europe. Naturally, the main task of achieving growth lies with national governments. The success of the leading post-socialist countries should be studied carefully; this, together with the insights of modern economic theory, should help to achieve high rates of growth in most of the transition economies in the long run.

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[181] H. Lankes and N. Stern, *Capital Flows to Eastern Europe and the Former Soviet Union*", EBRD Working Paper, No.27 (London), March 1997.

[182] F. Schneider, *Illegal Activities, but Still Value Added Ones: Size, Causes and Measurement of the Shadow Economies All Over the World*, University of Linz Working Paper, 0010 (Linz), 2000, mimeo.

CHAPTER 3

MACROECONOMIC POLICIES AND ACHIEVEMENTS IN TRANSITION ECONOMIES, 1989-1999

Stanislaw Gomulka[183]

3.1 Introduction

The primary purpose of this paper is to consider and answer the following questions:

- How far have the transition economies of central Europe and the former Soviet Union been able to establish the macroeconomic framework needed for sustaining investment and economic growth?
- What distinguishes the more successful from the less successful: initial conditions, the political environment, the state of institutions?
- How far have weak or missing institutions hampered effectual policy-making?
- Have macroeconomic policy dilemmas been intensified by weak institutions?
- Has too much emphasis been placed on lowering inflation – or reducing it too rapidly – at the expense of economic growth?
- What lessons can be drawn for those transition economies which are still struggling to achieve macroeconomic stability and economic growth?
- Under the emerging economic system, what is the potential contribution to growth of the technological convergence (catching-up) factor?

These specific questions are addressed in section 3.3 of the paper.[184] The wider issues of reform strategy and the content of the main macroeconomic policies are discussed in section 3.2. The transition countries covered in this survey are listed in table 3.2.1. They are divided into two groups: 13 central European and Baltic countries and 12 members of the Commonwealth of Independent States (CIS). This division is motivated, in part, by similarities in the choice of reform strategies made by the countries in each group. Table 3.2.1 also gives two GDP estimates for each country in 1998, one based on market exchange rates and the other based on purchasing power parity (PPP) exchange rates. The latter estimates are used to obtain each country's weighting. These weightings are then used in section 3.3 of the paper to produce weighted averages and absolute mean deviations for the main macroeconomic variables, as well as weighted econometric estimates of the correlation coefficients between output falls and inflation rates, all for the years 1991-1998.

The PPP estimates of GDP imply that, in 1998, the combined weighting of the CIS region was 3.7 per cent of the world economy and that of the central European and Baltic countries 2.4 per cent.

3.2 An overview of reforms and policies

(i) Reform strategy

The reform of the economic system which occurred in central Europe and the former Soviet Union in the 1990s has been fundamental, involving major changes of institutions, types of ownership, corporate governance, laws, modes of interpersonal behaviour and attitudes to work. Some institutions were cut in size or closed down, others expanded or created. These institutional changes were superimposed on massive changes in relative prices and the pattern of foreign trade; the latter changes caused, in turn, major shifts in the composition of output. In terms of institutions, skills, prices and products, there was therefore a large distance between the initial point (where a given post-socialist economy found itself just before the reform) and the end point of its intended transition. Reform strategies have addressed the content, the sequence and the speed of reforms required to effect this transition.

In adopting a broad reform strategy and specific policies, a transition country had to take into account its particular economic circumstances and political constraints. Such a strategy had typically six major components: *micro-liberalization* (especially with regard

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[183] The author wishes to acknowledge the debt to the organizers of the UN/ECE Spring Seminar, especially to Paul Rayment, for proposing the theme and the main questions of this paper. The final version benefited from the discussion at the seminar's meeting. I am particularly grateful to the four official discussants, George Kopits, Silvana Malle, Joze Mencinger and Leonid Grigoriev, and to Zdenek Drabek and Vincent Koen for their stimulating comments.

[184] All except the final question were formulated by Paul Rayment, Director of the Economic Analysis Division of the United Nations Economic Commission for Europe, on behalf of the Seminar's organizers.

TABLE 3.2.1

Population and GDP data for 25 transition economies of central Europe, the Baltic states and the CIS, 1994 and 1998

	1994	*1998*			
	Population (millions)	*GDP per capita, (thousands PPP$)*	*GDP (billion PPP$)*	*GDP (billion $)*	*PPP$/$*
Albania	3.4	2.9	9.9	3.2	3.1
Bulgaria	8.4	4.8	40.3	10.9	3.7
Croatia	4.5	6.8	30.6	21.9	1.4
Czech Republic	10.3	12.5	129	56.0	2.3
Estonia	1.5	7.6	11.4	5.4	2.1
The former Yugoslav Republic of Macedonia	2.1	4.4	9.2	3.3	2.8
Hungary	10.3	10.2	105	47.8	2.2
Latvia	2.6	5.6	14.6	6.9	2.1
Lithuania	3.7	6.4	23.7	10.8	2.2
Poland	38.5	7.7	296	148	2.0
Romania	22.7	5.6	127	38.5	3.3
Slovakia	5.4	9.8	52.9	20.4	2.6
Slovenia	2	14.3	28.6	19.1	1.5
CIS					
Armenia	3.6	2.2	7.9	1.8	4.3
Azerbaijan	7.5	2.2	16.5	4.0	4.1
Belarus	10.4	6.1	63.4	14.4	4.4
Georgia	5.5	3.3	18.2	5.3	3.4
Kazakhstan	17	4.3	73.1	25.2	2.9
Kyrgyzstan	4.6	2.3	10.6	1.6	6.5
Republic of Moldova	4.4	1.9	8.4	1.9	4.4
Russian Federation	148	6.5	962	275	3.5
Tajikistan	5.8	0.9	5.2	1.2	4.2
Turkmenistan	4	3.2	12.8	1.7	7.6
Ukraine	51.9	3.2	166	43.7	3.8
Uzbekistan	22.4	2.1	47.0	13.1	3.6

Source: GDP per capita in PPP dollar terms from IMF, *World Economic Outlook* (Washington, D.C.), October 1999. GDP (1998) levels in dollars at market exchange rates are from EBRD, *Transition Report* (London), 1999.

to prices, trade and entry), *macro-stabilization* (especially with regard to inflation, public finances and foreign debt), *structural changes* (especially privatization and international trade), *new market institutions* (especially with regard to commercial codes, property rights and the financial/capital markets sector), *safety nets* and *external assistance*. The first four were crucial components of any reform package. Soaring unemployment and the elimination of most subsidies to households required a complete remodelling of the welfare system. With the exception of the former German Democratic Republic (GDR), and to some extent also Bulgaria, Poland and parts of the former Yugoslavia (Bosnia, Kosovo) external assistance was typically small and of limited impact.

The inherited circumstances fall into two categories, common and country-specific. As the reform policies and transition paths have exhibited some basic similarities among countries, the common category would seem to have dominated. Nevertheless, the variations in country-specific circumstances were substantial enough to have a major impact on the choice of overall reform strategy as well as specific policies.

The similarities were possibly greatest with respect to micro-liberalization and certain important structural changes, notably reorientation of foreign trade and privatization. Somewhat unexpectedly, the greatest differences initially emerged in the area of macroeconomic policy. These differences, however, narrowed in the second half of the 1990s.

Three broad reform strategies may be distinguished: "shock therapy", rapid adjustment and gradual change. The shock therapy approach was only really applied in the former GDR. Although this strategy offered the potential for a fast reallocation of resources, it proved far too costly in the short and medium term to be of interest to any other post-communist country.[185] At the other end of the spectrum is a gradual strategy. This has been pursued successfully by China since the late 1970s. However, in conditions of a total (economic, institutional and political) crisis, virtually the only choice open to the former Soviet Union and central Europe was a form of rapid adjustment. A *strong* variant of it (variant S below) was adopted by some countries, e.g. Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, and a *weak* variant (variant W) by most other countries, particularly Russia and Ukraine. The differences between the two variants have been substantial, especially during the first few years of transition.

(a) *Rapid adjustment: the stronger variant (variant S, most central European and Baltic countries)*

One way of defining this variant was formulated by V. Klaus, the then Prime Minister of the Czech Republic, in the shape of 10 commandments.[186] They are as follows:

(i) Reforms in post-communist countries are the outcome of a complex social and political process, and cannot therefore be pre-planned or socially engineered by any one person or centre;

(ii) The role of foreign aid is marginal;

(iii) An economic shock, meaning a large fall in output, is inevitable;

(iv) Dramatic actions are required to impose a restrictive macroeconomic policy, liberalize prices and foreign trade and establish a process for privatization;

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[185] J. Kornai, "Ten Years After *The Road to a Free Economy*" (the author's self-evaluation), paper presented at the World Bank's Annual Conference on Development Economics (Washington, D.C.), 18-20 April 2000, suggests that, in the early 1990s, "many participants in the post-socialist transformation suffered from an obsession with speed", and notes that "excessive emphasis on speed leads to impatience, aggressiveness and arrogance". He uses mass-privatization programmes in the Czech Republic and Russia as examples. However, the actual policies of many reformers were often much less radical than their rhetoric. This applies also to possibly the most influential reformers of the region: Balcerowicz, Gaidar and Klaus.

[186] V. Klaus, *The Ten Commandments of Systemic Reform*, Group of Thirty Occasional Paper, No. 43 (Washington, D.C.), 1993.

(v) A restrictive macroeconomic policy must be sustained;

(vi) The price shock resulting from price liberalization must be vigorously defended and must survive;

(vii) Economic restructuring requires comprehensive privatization;

(viii) Transformation costs must be widely shared;

(ix) Successful transformation requires the opening of markets to foreign goods and the free flow of peoples and ideas;

(x) Successful transformation requires successful politicians.

These commandments well encapsulate the views of a substantial body of reformers – both decision-makers and their advisers, in the early 1990s. However, actual developments provide the basis for significant modifications to this original formulation.

The choice of reforms, while certainly the outcome of a political process, has been limited by the overriding goal of imitating or even replicating the well-known solutions, in terms of both institutions and policies, of market-based capitalist economies. Moreover, reformers can have, should have and usually do have specific reform blueprints for achieving this goal. These blueprints have been useful even if the timetable, the sequencing and the methods of their implementation may have changed under the weight of political pressures.

With respect to foreign aid, the main reason for its marginal role for most countries has been the size of their economies. Using the 1998 PPP exchange rates, the combined GDP of the former Soviet Union and central Europe, on the eve of the reforms, was some $3,500 billion (the data in table 3.2.1 imply that it was $2,300 billion in 1998). The investment needed to restructure economies of that size, so as to regain the pre-reform level of GDP, is probably of the same order of magnitude. The combined resources of the IMF, the World Bank and the EBRD available to transition countries, by comparison, are small and, in any case, can be provided only on a commercial basis, and therefore are subject to performance conditions which economies in transition cannot easily meet. Only transfers to the former GDR have been really large in relation to its GDP and, indeed, have been several times larger than the total aid extended to all other transition countries. However, the impact on economic recovery has been moderate. Moreover, in the case of Russia, it was not an extension of external financing but its discontinuation, following the crisis of August 1998, that forced the adjustments in domestic policies which accelerated the reform process. Still, there are a few countries, e.g. Bulgaria and Poland, in which foreign aid, especially in the form of partial debt cancellations, has been important and helpful.

Commandments four to seven formed the core of reform efforts. Short-term gains (if any) arising from conducting a loose macroeconomic policy turned out to be small, while medium and long-term gains from establishing a stable macroeconomic environment are commonly thought to be large. Initially, the main objective of a stabilization policy may, and possibly should, be moderate inflation rather than stable prices. But once a country has moved from transformation to recovery and sustainable growth, a high quality macroeconomic stability becomes essential. This requirement applies, above all, to the candidate members of the European Union. A similar caveat can be made with respect to Klaus's seventh commandment, concerning the need for rapid privatization. In Poland, state-driven privatization has been slow. But a rapid autonomous growth of the original private sector has ensured that the total private sector accounted, in 1999, for about 65 per cent of GDP. Privatization of state owned enterprises (SOEs), while usually helpful, may thus not be as necessary as some reformers initially believed. The quality of privatization has proved to be very important, and there is a trade-off between speed and quality.

The tenth commandment has also proved to be an overstatement. Successful politicians can be helpful, but not necessary for a successful transformation. Reform must be legitimized through a democratic political process. This is vital. But the initial legitimization was provided by the collapse of the communist system. This collapse offered a window of opportunity, the Balcerowicz period of "extraordinary politics", to initiate the kind of reforms which could not be easily reversed under the more hostile political conditions which prevailed later on. The socially costly phase of transition took place at a time when democratic institutions were in their early infancy. Consequently there were (and in most cases, still are) typically too many small parties with ill-defined policies, the division of power between the main central institutions has often been unclear and many politicians lack experience of efficient communication with the electorate. Such circumstances can produce confusion and political instability, which hinder the process of economic reform and pose a continual threat to democratic politics. The result has been frequent changes of government and, in many cases, legislation slowdowns. However, such frequent changes have also provided an opportunity to employ, in the cause of reform, the combined political capital of a large pool of politicians during the socially most costly phase of transformation.

From today's perspective, it is also noticeable that Klaus's formulation understates the importance of the task of creating a new legal and institutional environment and a new culture of habits and attitudes, which a modern market economy requires. This task has been particularly important in the countries of the former Soviet Union.

The more successful transitions of the central European and Baltic countries are associated with the S-variant of the rapid adjustment model. One of the most successful countries has been Poland, where real GDP in 1999 was one quarter higher than at the beginning of the transition in 1989 – by far the best result in the region. After a contraction of about 15 per cent in 1990 and 1991, the economy has grown at an average rate of 5 per cent per annum. Estonia, Hungary Latvia, Lithuania, Slovakia and Slovenia have also experienced rapid growth in the last few years.

The Polish model of transition consisted of five main elements:[187]

- complete liberalization of *de novo* private sector entry into almost all areas of economic activity (January 1989 and January 1990);
- adoption of the pre-1939 commercial code (1982) and abolition of communist party organizations in SOEs, which gave real power to the workers' councils that had formally exercised it since 1981 (end 1989);
- very rapid price liberalization (during 1989 the share of freely determined prices rose from 25 to 90 per cent);
- introduction of hard budget constraints on SOEs and a sharp reduction of inflation to a moderate level, through fiscal, monetary and wages polices (January 1990), followed by gradual disinflation;
- current account convertibility of the currency and almost complete foreign trade liberalization (January 1990).

The Polish programme was gradual in many important respects: it took 10 years to reduce inflation to below 1 per cent a month, mass privatization was limited mainly to small enterprises, social transfers have been large (pensions increased substantially in relation to wages) and budget deficits remained significant throughout the 1990s. The results of the programme were, on the positive side: the fast introduction of market prices based on relative scarcity and world prices for traded goods; a financial squeeze on SOEs, which forced them to rapidly release excess labour *and* physical capital (known as *asset privatization*); the maintenance of a minimum tolerable level of effective corporate governance in SOEs (due in part to the workers' councils); and the very rapid development of the *de novo* private sector. On the negative side, the restructuring of public services and public finances has been inadequate, limiting the growth of domestic savings and investments.

The Hungarian model has been similar. The same five main elements of reform were introduced as enacted and implemented in Poland, although their implementation was somewhat more gradual and workers councils had little importance. However, the bankruptcy law that was enacted and implemented has been possibly the most radical in central Europe. Also the growth of the domestic *de novo* private sector tended to be in services rather than in manufacturing, where there was a fairly rapid development due to foreign direct investment (FDI). A larger external debt burden and poorer macroeconomic policies meant that stabilization of the GDP contraction took longer than in Poland and – more significantly – the start of rapid growth was delayed by five years (until 1997).

Slovenia was also somewhat of an exception on two counts: earlier, pre-transition reforms had been more substantial than elsewhere in central Europe and the initial crisis was much more limited. Hence a more gradual transformation was feasible and, indeed, adopted in the early 1990s.

Following the adoption of such programmes, the experience of successful transitions indicate that growth can resume quickly and can proceed at a rapid pace. This growth has been driven almost entirely by *de novo* private sector development, rather than through the restructuring of SOEs, privatized or otherwise.[188] *De novo* private activity was at first predominantly domestic and concentrated in services. But as time went on, in all successful countries it came to involve significant foreign direct investment and to expand into manufacturing industry.

The experience of the central European and Baltic countries demonstrates the following: the usefulness of pre-existing rules and institutions (workers' councils, a commercial code, a legal system); the importance of macroeconomic stabilization and the accompanying imposition of hard budget constraints; and the importance of the liberalization of prices, trade and entry for growth of new private enterprise.

(b) Rapid adjustment: the weaker variant (variant W, most CIS countries)

In Russia, the 1992 attempt at sharp budget hardening, disinflation and full liberalization of prices, trade and entry, the Gaidar plan, failed. This meant that enterprises were subsequently under less pressure to divest physical assets and to shed labour they did not need, thus effectively denying *de novo* private firms the resources they needed for their development. The failure to liberalize thoroughly kept the set-up costs for new firms high. For several years large subsidized credits and entry barriers undermined the credibility of the strategy, inducing capital flight, creating opportunities for tax avoidance and criminal asset stripping, as well as slowing down the restructuring of old firms. The Russian reform was nevertheless radical, since by and large prices and wages were liberalized quickly. As a result, markets started to develop, taking over from the planners the informational and coordination roles. A large-scale privatization programme was also initiated early on and implemented quickly. This embarking on privatization before full liberalization (involving not just product prices, exchange rates and interest rates but also trade and entry terms), and before the hardening of budget constraints for enterprises and disinflation, was the key characteristic of the reform strategy adopted by Russia and most other CIS countries in the first few years of transition. However, these differences between variants S and W have narrowed in the late 1990s.

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[187] This description of the programme and the model follows that given by M. Dabrowski, S. Gomulka and J. Rostowski in "Whence reform? A critique of the Stiglitz perspective", London School of Economics and the Central European University, 2000, mimeo. More details of the model may be found in S. Gomulka, "The Polish model of transformation and growth", *The Economics of Transition*, Vol. 6, No. 1, March 1998, pp. 163-171, and in M. Dabrowski, "Ten years of the Polish economic transition 1989-1999", paper presented at the Fifth Dubrovnik Conference on Transition Economies: *Ten Years of Transition: What Have We Learned and What Lies Ahead* (Dubrovnik), 23-25 June 1999.

[188] J. Rostowski, *Private Sector Development, Structural Changes and Macroeconomic Stabilization: The Case of Poland 1998-93*, London School of Economics, Centre for Economic Performance, Discussion Paper, No. 159, 1993, and S. Gomulka, op. cit.

(ii) Was the output collapse inevitable?

The phenomenon of large falls in output in the economies of central Europe and the former Soviet Union during their systemic transformation in the 1990s is one of the most researched – yet one of the most controversial. Kornai proposed the term "transformational recession" to indicate that these falls were directly related to the change of the economic system rather than to transition policies. However, these falls occurred against a background of rapid growth in China and Viet Nam, which had also been introducing fundamental changes in their economic systems. This may indicate that the falls were related not merely to the systemic transformation as such, but also to its speed. Stiglitz, among others, argues that the speed of transition was a choice variable, and that choosing high speed was a major error.[189] In a recent survey of evidence and interpretations of the recession, the present author suggested that, unlike in China and Viet Nam, in the countries of central Europe and the former Soviet Union (and Mongolia) the rapid speed was forced principally by the initial conditions of their deep and all-embracing (economic, institutional and political) crisis.[190] In the survey, I identified four classes of specific causes of output falls: 1) massive and rapid changes in relative prices in conditions of limited resource mobility; 2) the elimination of excessive real aggregate demand to establish buyers' markets; 3) the collapse of captive markets within the former CMEA area; and 4) the collapse of the arms industry and of state financed investments in housing, energy, agriculture and the infrastructure. Relative prices changed mainly as a result of rapid price and trade liberalization, sharp increases in interest rates, large up-front devaluations and considerable harmonizations of turnover and border tax rates.

A sharp price liberalization caused large supply-side and demand-side shocks that reduced outputs and increased prices. However, the high speed of price liberalization was in part a consequence of the collapse of central planning institutions, since this collapse created the need to establish immediately a market-based coordination mechanism, of which market-clearing (free) prices were an essential part. A fairly rapid liberalization of prices, trade and entry was also needed to enhance competition and initiate structural changes

In the initial period of transition, economic developments in the former Soviet Union and central Europe reflected not so much the quality of current reforms, but the pre-reform crisis conditions, which had led to the collapse of the Soviet style economic, military and political system. In Russia, because of this crisis, industrial output had already started to fall sharply in 1991, still under the old system. Whether reform had taken place or not, this fall would have presumably continued as the system unwound, as the experience of slow and/or late reformers would indicate, e.g. Belarus, Bulgaria and Romania. The collapse of the Warsaw Pact (and the associated contraction of the defence industry), the CMEA (and the associated contraction of trade) and the USSR itself (and the associated disruption of intra-Soviet production links), were all the largely inevitable consequences of earlier events in Russia and elsewhere. The reduction in the output of the defence and defence-related industries alone, according to one knowledgeable source, accounts for 60 per cent of the fall in industrial production in Russia.[191]

In his forceful challenge to the merits of fast liberalization and stabilization, Stiglitz accepts that, according to economic theory, reducing price distortions through price and trade liberalization and price stabilization, should, in addition to improving incentives through privatization, "have moved countries closer to their production possibilities curve".[192] The problem for him is that "output should have soared – instead it plummeted". Much of his challenge to the conventional theory is motivated by this apparent contradiction. However, Stiglitz ignores the arguments which associate output falls in the initial phase of transition mainly with unusually large inherited (structural and price) distortions and with the institutional crises which forced the tempo of price liberalization. Despite wide differences in reform policies, the cumulative falls in industrial output, at 40-60 per cent, were not just large but also similar between countries. He also ignores the fact that, as Aslund, Boone and Johnson first showed,[193] the speed of macroeconomic stabilization had a significant effect on the time profile of decline, but had little impact upon the magnitude of the cumulative fall of output. These falls tended to be larger in the countries that were slow in bringing inflation to moderate levels, say to below 40 per cent per annum. The evidence is too weak to suggest the presence of causality from higher inflation to larger cumulative output falls. It is probably more likely that the countries (mainly within the former Soviet Union) which were subjected to larger supply-side and demand-side shocks also experienced larger output falls and, simultaneously, higher inflation. (I shall return to this point in section 3.3(v).) Nevertheless, apart from increasing inflation, the main effect of a loose macroeconomic policy would appear to have been, in most cases, to reduce the rate of fall and, therefore, to extend the length of the transformational recession.[194] However, as the EBRD, *Transition Reports 1995-1999* note, the evidence goes to support the proposition that, in the countries which liberalized and stabilized to a greater extent, output not only stopped falling earlier, but also started to recover faster. (I shall return to this last point in section 3.3.)

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[189] J. Stiglitz, "Whither reform", paper presented at the World Bank Annual Bank Conference in Development Economics (Washington, D.C.), 1999, and "Quis Custodiet Ipsos Custodies?", paper presented at the World Bank Annual Bank Conference on Development Economics – Europe (Paris), 1999.

[190] S. Gomulka, "Output: causes of the decline and the recovery", in P. Boone, S. Gomulka and R. Layard (eds.), *Emerging from Communism: Lessons from Russia, China and Eastern Europe* (Cambridge, MA, MIT Press, 1998).

[191] Y. Yassin, "Defeat or retreat? Russia's reforms and the financial crisis" (Moscow), 1999, mimeo.

[192] J. Stiglitz, op. cit.

[193] A. Aslund, P. Boone and S. Johnson, "How to stabilize: lessons from post-communist countries", *Brookings Papers on Economic Activity*, 81(1) (Washington, D.C.), 1996, pp. 217-315.

The medium-term purpose of the reforms is to restructure transition economies in favour of activities producing more value added per unit of primary inputs (of labour and capital). If restructuring needs had been small, real wages highly flexible and labour and capital resources easily moveable, then large output falls would have been unnecessary to effect such a restructuring. However, restructuring needs were, in fact, exceptionally large and the mobility of resources was quite limited. In such circumstances unemployment, although it does involve short-term costs, performs a positive signalling role, by making it clear to people that they have to either change skills and move to higher productivity work or accept lower real incomes. Therefore, the welfare cost associated with a temporary rise in unemployment can be thought of as a form of investment needed to achieve a permanent welfare gain from a better allocation of labour and other resources.

(iii) Money has been the key nominal anchor

In most countries of central and eastern Europe it was assumed that the stabilization of liberalized prices must be based on the standard International Monetary Fund approach, with an important role as nominal anchors assigned to an incomes policy and – when feasible – a fixed exchange rate, in addition to restrictive fiscal and monetary policies. In the event, however, the supply of credit to governments and enterprises proved by far the dominant nominal anchor, with the exchange rate and the incomes policy playing only supportive roles.

Two related broad conclusions can be drawn from the evidence regarding the experience of disinflation in transition economies. One is that fiscal fundamentals, that is, the size of the budget deficit of general government and the way it was financed, have been the key to disinflation (tables 3.2.2 and 3.2.3). The other is that the policy of a fixed nominal exchange rate was helpful but not essential, and that, in any case, its survival was strictly conditional on a sound fiscal policy.[195] Also, "the transition record suggests that innovative exchange rate arrangements can provide only a brief interval during which sound fiscal discipline needs to be put in place for controlling inflation".[196] With respect to the exchange rate, low levels of international reserves and the poor credibility of macroeconomic policies just before the start of transition, forced large up-front devaluations in all countries except Hungary. The result was that, initially, world prices offered little discipline for domestic prices. A restrictive incomes policy was intended to achieve a targeted inflation rate with other policies being less restrictive and, hence, a somewhat smaller recession. However, given the large changes and uncertainties, it has proved difficult to coordinate incomes policy with the main (fiscal and monetary) macroeconomic policies. In Poland in 1990 and Czechoslovakia in 1991, for instance, those main policies were initially so restrictive that in most enterprises incomes policies were not binding. In the former Soviet Union the authorities took the view that a restrictive incomes policy could not be implemented for political reasons. In the CIS countries the politically dependent central banks, in their credit policy for enterprises, were initially concerned above all with the level of economic activity, typically the chief domain of governments. As noted earlier, in the first few years of transition, the CIS governments ran large budget deficits which were monetized (table 3.2.3). The consequence was wage-price inflationary spirals and (near) hyperinflations.

In the initial years some central banks made successful use of the instrument of credit limits. Deploying this instrument means that real interest rates need not be high – although they should not have been as negative as they were in most of the former Soviet Union. These rates may have to be higher in the intermediate stages of transition when credit limits are lifted and the real exchange rate has had the time to appreciate. During that stage high interest rates became the key policy instrument for protecting bank savings and restraining wage inflation. However, in the advanced stage of transition, higher credibility and capital account liberalization have resulted in increased international capital mobility. This in turn forces some convergence of high domestic interest rates to low world interest rates.

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[194] On this point, see also EBRD, *Transition Report 1999* (London), p. 64.

[195] D. Begg, "Disinflation in central and eastern Europe", and S. Gomulka, "Comment on Begg", in C. Cottarelli and G. Szepary (eds.), *Moderate Inflation: The Experience of Transition Economies*, IMF and National Bank of Hungary (Washington, D.C.), 1998.

[196] P. Desai, "Macroeconomic fragility and exchange rate vulnerability: a cautionary record of transition economies", *Journal of Comparative Economics*, Vol. 26, No. 4, 1998, pp. 621-641.

TABLE 3.2.2

Key macroeconomic indicators for the central European and Baltic economies, 1991-1998

	1991	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
GDP growth *(per cent)*								
GDP-weighted averages	-10.7	-4.1	-0.3	3.7	5.6	3.9	2.7	1.8
GDP-weighted absolute mean deviations	2.9	5.0	3.2	1.6	1.9	2.1	4.6	3.9
Inflation, CPI *(per cent)*								
GDP-weighted averages	109.9	183	115	29.9	24.2	21.3	46.1	12.0
GDP-weighted absolute mean deviations	77.0	208	131	14.0	11.7	11.4	54.1	8.3
General government budget balance *(per cent of GDP)*								
GDP-weighted averages	-3.2	-4.8	-3.4	-3.2	-3.0	-3.2	-3.1	-3.1
GDP-weighted absolute mean deviations	3.8	2.6	2.9	1.9	1.3	1.3	0.9	1.1
General government expenditures *(per cent of GDP)*								
GDP-weighted averages	..	47.3	45.7	44.7	43.8	43.4	43.1	43.1
GDP-weighted absolute mean deviations	..	4.9	6.5	5.2	4.5	4.7	5.2	3.0
Gross reserves *(months of current account expenditures)*								
GDP-weighted averages	1.9	2.1	2.5	3.0	4.4	3.9	4.1	4.5
GDP-weighted absolute mean deviations	0.9	1.0	0.8	0.9	2.0	1.7	1.4	1.8
Broad money *(per cent of GDP)*								
GDP-weighted averages	..	47.2	44.7	44.6	44.8	45.7	44.5	43.8
GDP-weighted absolute mean deviations	..	15.5	16.8	16.6	15.2	14.5	12.4	11.7
Lending rate *(per cent)*								
GDP-weighted averages	..	141	45.9	35.7	27.7	45.9	25.4	24.4
GDP-weighted absolute mean deviations	..	196	26.3	16.4	9.3	42.2	9.4	10.0

Source: Author's calculations based on official data, as reported in EBRD, *Transition Report 1999* (London). The GDP weights are from table 3.2.1, using the PPP GDP estimates.

Note: Inflation is the within-year change (December to December). General government: central, local and extra-budgetary funds. Broad money includes cash in circulation, current deposits and time deposits, in both domestic and foreign currencies.

TABLE 3.2.3

Key macroeconomic indicators for CIS economies, 1991-1998

	1991	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
GDP growth *(per cent)*								
GDP-weighted averages	-6.2	-14.3	-9.6	-13.7	-5.3	-3.3	1.0	-2.9
GDP-weighted absolute mean deviations	2.7	2.1	2.0	2.6	2.5	2.1	1.7	2.4
Inflation, CPI *(per cent)*								
GDP-weighted averages	155	2 391	2 431	514	151	30.2	15.1	70.6
GDP-weighted absolute mean deviations	10.5	303	2 435	471	51	13.2	8.1	29.4
General government budget balance *(per cent of GDP)*								
GDP-weighted averages	-36.5	-15.9	-10.4	-6.4	-7.6	-6.8	-5.1	-5.3
GDP-weighted absolute mean deviations	10.2	3.0	2.6	1.1	2.2	1.9	0.8	1.3
General government expenditures *(per cent of GDP)*								
GDP-weighted averages	..	64.8	45.2	44.0	35.6	37.1	38.2	35.0
GDP-weighted absolute mean deviations	..	9.1	4.0	3.5	3.3	5.2	4.4	4.0
Gross reserves *(months of current account expenditures)*								
GDP-weighted averages	..	..	..	1.6	2.6	2.5	2.6	2.0
GDP-weighted absolute mean deviations	..	..	..	0.8	0.7	1.0	1.0	0.6
Broad money *(per cent of GDP)*								
GDP-weighted averages	..	39.3	25.4	19.2	13.7	12.8	13.9	16.6
GDP-weighted absolute mean deviations	..	3.3	6.4	5.8	0.9	1.1	0.9	1.9
Lending rate *(per cent)*								
GDP-weighted averages	..	..	..	..	191	65.2	36.6	39.6
GDP-weighted absolute mean deviations	..	..	..	..	49	5.3	4.2	3.9

Source: As for table 3.2.2.

Note: As for table 3.2.2.

(iv) The exchange rate policy

The freedom to set the exchange rate was initially tightly constrained by low levels of international reserves and an urgent need to win credibility for the new policy of full current account convertibility at a uniform rate. It was desirable to have a regime of a fixed nominal exchange rate in order for the rate to serve as an anchor for domestic prices, thus reducing inflationary expectations and inflation itself. However, the countries which adopted such a regime had to strongly devalue up-front to ensure a sufficiently competitive rate, so that reserves would increase. As I have already noted, such devaluations opened up large gaps between domestic and foreign prices, thereby undermining the role of the exchange rate as an anchor. In Russia (and many other CIS countries) international reserves were too low and monetary and fiscal policies too lax to contemplate nominal exchange rate pegging. A floating exchange rate regime was therefore adopted. However, the need to build up reserves meant that Russia and other floaters could not adopt a pure float. Once the reserves become sufficiently large as a result of interventions in the exchange market, the case for a pure float is stronger. A broad generalization would be that, at the (early) stabilization stage of transition, a concern with disinflation favoured nominal exchange rate pegging, while at the (later) advanced stage, when inflation was already low, the need to limit the destabilizing effects of capital inflows favoured a more flexible exchange rate regime, including a pure float as an extreme option. Between these two stages, both the inflation rate and the level of reserves would be moderate, and the concern to remain competitive favoured the adoption of an exchange rate regime that combined some flexibility in nominal terms with some stability in real terms. The regime chosen for this intermediate stage was typically a crawling band, with the pre-announced rate of crawl linked to anticipated inflation. This rate would therefore decline as disinflation progressed, while the band would be narrow initially and widen over time to a maximum of the ERM-2 size of ±15 per cent. To limit the domestic cost of any external shock, it was also desirable to peg to a basket of currencies, reflecting the composition of trade flows, rather than to any single currency.

Exchange rate movements in all transition economies, with the notable exception of Hungary, have followed a similar path, with a sharp depreciation at the start of transition followed by gradual real appreciation. Such a path is hardly surprising given the initial conditions: low levels of international reserves, large risks associated with transition, inexperienced policy makers, no record of convertibility and typically poor credibility of policies.[197]

Several countries adopted a currency board, under which nominal pegging is combined with full backing of the base money by international reserves. The key benefit of such an arrangement is a sizeable instant gain in credibility. This lowers immediately inflationary expectations, which in turn reduce market interest rates, both nominal and real. As the experience of the Baltic states in the early 1990s and Bulgaria in 1997 showed, falls in interest rates could be large and rapid. In the short term, lower interest rates reduce the cost of servicing debt, both private and public, which in turn reduces both the stock of under-performing assets of the banking sector and the budget deficit of the government, thus further improving credibility. A currency board also helps to instil confidence among investors and hence supports recovery of the enterprise sector.

However, the strait-jacket of the currency board deprives the macroeconomic framework of any flexibility with respect to the exchange rate. This, and indeed any fixed nominal exchange rate regime, may mislead the private sector into believing that the exchange rate risk is completely absent. The result is an in-built tendency to contract a large foreign debt, which was the case not only in South-East Asia but also in the Czech Republic. This tendency is particularly strong in countries with weak financial institutions, to which category most transition countries still belong.[198] Such a debt, whether public or private, in turn produces a risk of an attack on the currency, which, if successful, leads to sharp devaluation and stagflation.

3.3 A detailed discussion of specific issues

(i) The macroeconomic framework: what progress?

To be conducive to investment and growth, the macroeconomic environment has to meet several criteria. I shall first articulate these criteria and then use them for an evaluation of the progress which the 25 transition countries have made during the 1990s.

The criteria that, I suggest, would be desirable to meet are as follows:

(i) The inflation rate to be in the moderate range of 10 to 40 per cent, with a good prospect of it falling below 10 per cent and remaining in the 0 to 10 per cent range;

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[197] Economic and other factors which underlie exchange rate movements in transition economies are discussed by L. Halpern and C. Wyplosz, "Equilibrium real exchange rates in transition economies", *IMF Staff Papers*, Vol. 44, No. 4 (Washington, D.C.), 1997, pp. 430-460 and by the Symposium on Exchange Rates, *Journal of Comparative Economics*, Vol. 26, No. 4, December 1998. The main reason for Hungary being the exception was, probably, the country's high standing among foreign investors at the start of transition. Specific issues with respect to the exchange rate policy of the transition economies which are candidates for membership of the European Monetary Union (EMU) are discussed among others, in G. Kopits, *Implications of EMU for Exchange Rate Policy In Central and Eastern Europe*, IMF Working Paper WP/99/9 (Washington, D.C.), January 1999.

[198] S. Fries, M. Raiser and N. Stern, "Stress test for reforms: transition and east Asia 'contagion'", *The Economics of Transition*, Vol. 7, No. 2, July 1999, pp. 535-567, find that the transition countries with large public or private sector imbalances and low reserve cover of short-term debt are more vulnerable to contagion and that these weak fundamentals have their origin in inadequate structural and institutional reforms. A good comparative discussion of risk indicators for the banking sector in six transition economies of central and eastern Europe is provided in S. Kawalec, "Banking sector systemic risk in selected European countries", CASE Report No. 23 (Warsaw), 1999.

(ii) The general government budget deficit to be reduced from the initial 5 to 30 per cent of GDP for most countries to a level below 3 per cent of GDP, with a high premium given to a policy of a budget surplus;

(iii) The public debt to be stable at a level significantly below 60 per cent of GDP;

(iv) General government expenditure to be reduced from its pre-transition level of some 50 to 60 per cent of GDP to a level in the range of 30 to 40 per cent of GDP;

(v) Official reserves of foreign exchange to equal at least four months of imports of goods and services, exceed total (public and private) short-term foreign debt, and be equal to at least one third of public foreign debt;

(vi) Direct taxes (especially profit taxes) to be low, together with social insurance contributions providing revenues of less than, say, 20 per cent of GDP;

(vii) The monetization of the economy to be substantial, equal at least to 30 per cent of GDP;

(viii) The lending rate to be below 20 per cent in nominal terms and below 10 per cent in real terms.

The first three criteria are those of the Maastricht treaty. They are not independent. If D is public debt, Y is GDP, P is the price level and ΔD is the budget deficit, fiscal sustainability requires that the ratio D/PY be constant, which implies that:

$$\frac{\Delta D}{PY} = (\pi + g)\frac{D}{PY} \qquad \ldots\ (1)$$

where π is the rate of inflation and g is the growth rate of GDP. The left hand side of (1) is the budget deficit as a proportion of GDP, and D/PY on the right hand side is the targeted debt-to-GDP ratio. For most of the EU member countries, the rate g is expected to be low, say 3 per cent. The maximum budget deficit of 3 per cent is thus consistent with the maximum debt of 60 per cent only if the inflation rate is maintained, in this case, at 2 per cent. Transition economies are expected to grow at a rate (significantly) higher than 3 per cent. Those countries which intend to join the EMU will need to meet the Maastricht criteria on inflation and the budget deficit, hence equation (1) implies that they will have to keep public debt at a level (significantly) lower than 60 per cent of their GDP.[199] Criteria (ii), (iv) and (vi) are also related. Their common motivation is to increase national savings and improve the incentives for work and investment. Criterion (v) is intended to reduce the exchange rate risk and criterion (vii) serves to indicate that the banking sector has developed sufficiently to intermediate effectively between savers (mainly households) and investors (mainly enterprises).

The differences between the two groups of countries can be noted in tables 3.2.2 and 3.2.3. Compared with the central European and Baltic countries, in the CIS countries both inflation and budget deficits have been much higher, but public expenditures have declined more sharply. Gross reserves have increased to adequate levels in the central European countries, but still remain very low in the CIS region. The ratios of broad money to nominal GDP have been remarkably stable, at moderately high levels, in the central European and Baltic countries, but they declined sharply, as one would expect, during the high inflation period in the CIS region where they now stand at very low levels. Despite these significant differences, a considerable convergence has taken place in macroeconomic conditions between and within the two groups, together with a sharp improvement over time in both.

In terms of the eight macroeconomic criteria, the central European and Baltic countries are close to meeting the criteria with respect to the variables in table 3.2.2. The data on public debt and taxes also indicate compliance with the criteria for these two additional indicators. For the CIS region, the macroeconomic balance is still fragile, and the macroeconomic environment, while no longer as hostile to growth as it was in the early 1990s, needs to be significantly improved to become growth-friendly. The financial crisis of August 1998 revealed the extent of Russia's macroeconomic imbalance. However, following this crisis, policy adjustments in Russia and elsewhere in the CIS have contained its destabilizing effects, restored equilibrium and, consequently, reduced further the gap in performance between this group and the central European and Baltic countries.

(ii) What distinguishes the more successful from the less successful countries?

I propose to measure the success of reforms in the transition countries by their ability to recreate the (institutional, legal and economic) conditions for rapid and sustainable growth. This ability is indicated by the increase in output since the start of recovery. It is this yardstick which differentiates strongly the Baltic states from, for example, Russia and Ukraine within the former Soviet Union, and much of central Europe from much of the former Soviet Union. It is natural to ask about the factors underlying these differences: are they initial conditions, the state of institutions or the political environment?

The cumulative changes in output between 1989 and 1998, and between its lowest point and its level in 1998, are shown in table 3.3.1, where the countries are also graded according to their commitment to liberalization and stabilization. Several countries achieved significant recoveries in GDP growth, but some

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[199] Fiscal sustainability in transition economies has been discussed recently by several authors, e.g. W. Buiter, *Aspects of Fiscal Policy in Some Transition Economies under Fund-Supported Programs*, IMF Working Paper WP/97/31 (Washington, D.C.), April 1997.

TABLE 3.3.1

GDP growth and reforms in the central European, Baltic and CIS economies

(Per cent, index)

	Growth (per cent)		*Reforms (index)*	
	1998 from lowest level	*1989-1998*	*Liberalization*	*Stabilization*
Albania	43.1	-14	3	5
Bulgaria	3.5	-34	3	5
Croatia	20.6	-22	3	5
Czech Republic	12.7	-5	5	5
Estonia	25.7	-24	5	5
The former Yugoslav Republic of Macedonia	5.3	-28	3	3
Hungary	16.2	-5	5	5
Latvia	14.0	-41	3	5
Lithuania	19.8	-35	3	5
Poland	42.5	17	5	5
Romania	1.8	-24	3	5
Slovakia	32.9	–	5	5
Slovenia	25.7	4	5	5
CIS				
Armenia	31.8	-59	3	3
Azerbaijan	17.9	-56	1	3
Belarus	22.6	-22	1	3
Georgia	29.2	-67	3	3
Kazakhstan	–	-39	3	3
Kyrgyzstan	20.4	-40	3	5
Republic of Moldova	–	-68	3	5
Russian Federation	–	-45	3	3
Tajikistan	5.8	-58	1	3
Turkmenistan	4.2	-56	1	3
Ukraine	–	-63	1	3
Uzbekistan	6.1	-10	1	3

Source: EBRD, *Transition Report 1999* (London).

Note: Early liberalizers are given grade 5. They are defined as countries that had achieved "complete price liberalization, full current account convertability and almost complete small-scale privatization". Late liberalizers achieved these thresholds after 1993. They are given grade 3. The remaining countries are given grade 1. With respect to stabilization, countries are divided into early stabilizers, those which stabilized before the end of 1993, and late stabilizers (all other countries). The grades given are, respectively, 5 and 3.

of them are not reform related. Internal conflicts led to very deep recessions in Albania, Armenia, Azerbaijan and Georgia; subsequent improvements in political stability would have contributed much to the recovery of their economies. There are also two countries, Belarus and Kyrgyzstan, where substantial recoveries may have been artificial, as they reflect in part the postponement of the needed structural changes.[200]

There are a substantial number of empirical studies which attempt to explain the wide variation in the rate and length of recovery. These studies fall into two broad groups, one based on macroeconomic data and the other on enterprise data. One of the latest comprehensive studies in the first group, using a general-to-specific modelling approach, finds some evidence in support of "the pre-eminence of structural reforms over both initial conditions and macroeconomic variables in explaining cross-country differences in performance and the timing of the recovery".[201] In particular, more liberalized economies grow faster. However, as the periods of recovery have been short for most countries, econometric results are not yet stable. The wide differences in performance within countries suggest that initial conditions might be more potent than indicated by aggregate data. Indeed, another recent empirical study, using a somewhat different statistical method, finds that growth performance during the 1990s was "substantially determined by initial conditions, both directly and indirectly through their impact on structural reform".[202]

The periods of positive growth have been short for most countries, but especially for the three main CIS countries – Kazakhstan, Russia and Ukraine, and for Bulgaria and Romania in south-east Europe. These five countries (together with the Republic of Moldova) are clearly the least successful of all the 25 transition countries in table 3.3.1. Recovery in both the Czech Republic (1997-1999) and Hungary (1995-1996) has suffered from unexpected macroeconomic instabilities. The long pause in recovery in the Czech Republic has prompted a reappraisal of the virtues of rapid voucher-type privatization. It is this negative experience of the Czech Republic and the much better growth performance of Poland, Estonia and, more recently, Hungary, which has led to the "new wisdom", namely that the success of transition depends above all on a rapid creation of conditions – institutional, legal, microeconomic and macroeconomic – which are conducive to the development and growth of a new private sector (including FDI). From this perspective, it is clear that with the exception of some authors, notably Kornai,[203] the early conventional view overestimated the positive impact on performance of a fast privatization of SOEs and, by the same token, failed to appreciate sufficiently the key role that a completely new private sector would play in the recovery and growth.

Given the central role of the new private sector in recovery and post-transition growth, it is worth noting the presence of wide international differences in the domestic/foreign composition of that sector, with Hungary and Poland at the extremes and Estonia somewhere in between. In these three countries, strong liberalization policies with respect to prices, trade and entry were adopted early, and in conjunction with a policy of harder budget constraints and increased competitive pressures on SOEs. Poland was also helped by the presence of a sizeable private sector outside agriculture at the beginning of transition.

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[200] According to the Belarus Minister of Economy, economic growth "during the second half of the 1990s was substantially initiated by additional loading of old manufacturing facilities and was boosted ... by emission credits [which] allowed Belarus to preserve her manufacturing potentials and to solve some important social problems", V. Shimov, report presented at the UN/ECE Spring Seminar (Geneva), 2 May 2000.

[201] A. Berg, E. Borensztein, R. Sahay and J. Zettelmyer, *The Evolution of Output in Transition Economies: Explaining the Differences*, IMF Working Paper WP/99/73 (Washington, D.C.), May 1999.

[202] E. Falcetti, M. Raiser and P. Sanfey, "Defying the odds: initial conditions, reforms and growth in the first decade of transition", London School of Economics and EBRD (London), May 2000, mimeo.

[203] J. Kornai, *The Road to a Free Economy* (New York and London, Norton & Co, 1990).

(iii) How far have weak or missing institutions hampered effectual policy-making?

In the first decade of the transformation, the institutional deficiency was severe, and this added an additional dimension of difficulty to policy-making. Macroeconomic management was particularly difficult in the new countries of the former Soviet Union, which initially lacked their own currencies and central banks and where international reserves were almost non-existent. With the exceptions of Hungary and Slovenia, the introduction of personal taxes and the replacement of turnover taxes by a proper VAT could not take place at the start of the transition. The capital market was initially almost non-existent and its development has been slow. The result of these two types of deficiency was that budget deficits were larger and their financing was to a greater extent achieved by outright monetization than would otherwise have been the case. Large or hyperinflations wiped out most bank savings in all but a few transition countries, thus limiting the role of the banking sector in economic restructuring. Politically independent bank supervision did not exist under the old system, and its necessarily gradual establishment during the transition meant that in many countries it was too weak to prevent bank failures. High rates of inflation and poor banking practice must have been major factors underlying low bank savings, the flight from domestic money, and the use of parallel currencies (especially dollars and deutsche marks).

Given these extreme initial circumstances, it is remarkable that it took the new countries of the former Soviet Union only some four to five years to establish the basic institutional framework needed to conduct a reasonable macroeconomic policy – by creating central banks, new currencies, bank supervision, international payments systems, new taxes and tax collection systems, stock exchanges, securities commissions, labour exchanges and new social benefit systems. The result has been a vast improvement in the macroeconomic environment of those countries in the second half of the 1990s. Nevertheless, the new central institutions still lack high quality personnel, and they have yet to establish a tradition of trust and behaviour based on transparent and stable rules, consistent with long-term public interest and market principles.

The ultimate success of transition will depend on the establishment of appropriate market institutions supporting macroeconomic stability, entrepreneurship and competition. Such institutional changes are inherently slow and depend on the political commitment to reform of governments and parliaments, and on their practical effectiveness in implementing reforms and policies. This commitment was clearly stronger and its effectiveness probably greater in the central European and Baltic countries than in the CIS. This difference reflects not only the longer and stricter socialist central planning in the CIS, but also a much stronger influence of the European Union in the central European and Baltic countries, including (in contrast to the CIS) the pull of the strategic aim of membership of the European Union.

(iv) Have policy dilemmas been intensified by weak institutions?

In several instances, weak institutions led to a renewal of macroeconomic instability or to a serious threat of such an instability. A clear case was Albania in 1996, when the rapid growth of a pyramid system led to a general crisis of confidence and almost to civil war. Another, and more important, example was the case of Bulgaria in 1997, when poor banking supervision led to a sharp growth of underperforming assets. This in turn forced interest rates to such high levels that the cost of servicing Bulgaria's public debt became unsustainable. There were two policy options for Bulgaria (and the IMF). One was to inflate away this debt by a non-equivalent currency change or by printing a great deal of money, and then introduce a stabilization programme. The other was, effectively, to abolish the central bank and introduce a currency board in its place. Such an institutional reform meant replacing domestic monetary control by nominal exchange rate targeting and depriving the government of the option of monetizing its budget deficit. The currency board option was, in fact, adopted on the assumption that the gain in credibility would be large enough to bring about sharp falls in both inflation and interest rates. This assumption was vindicated by actual developments. Currency boards had been adopted earlier by the Baltic states for similar reasons. However, the most spectacular institutional failure was in Russia. There, poor cooperation between the executive and the legislative branches of government, the weakness of the tax administration and lax expenditure controls led to excessive short-term foreign borrowing in 1997-1998, and resulted in a financial crisis in August 1998. In Poland, during the early stage of transition the central bank operated a system of credit limits for commercial banks, a practice which was discontinued only with the development of an interbank money market. The performance of transition economies and, indirectly, the conduct of macroeconomic policies, were also influenced by weak corporate governance and uncertainties with respect to enforcement of contracts, including those concerning property rights. These factors have probably contributed to the phenomenon of capital flight from Russia and may account for the limited amount of foreign direct investment in most countries of the CIS. The recent prolonged recession in the Czech Republic (1997-1999) is also difficult to explain without reference to the quality of the corporate governance of the country's enterprises, following its coupon privatization programme. Finally, banking supervision may have been inadequate to prevent the growth of underperforming loans in many countries, including the Czech Republic and Romania. This in its turn required repeated and expensive recapitalizations of state owned banks by governments.

(v) Has too much emphasis been placed on lowering inflation – or reducing it too rapidly – at the expense of economic growth?

As I discussed elsewhere, the first IMF-supported programmes for Poland and Russia placed much emphasis on a swift disinflation.[204] But these programmes tended also to underestimate the severity of the supply and demand shocks associated with the institutional crisis and price liberalization, and did not sufficiently appreciate the fact that such shocks would at the same time sharply reduce output and be highly inflationary. For the years 1992-1998 and for all the 25 transition countries listed in tables 3.2.2 and 3.2.3, there is a fairly strong association between the fall in output and the inflation rate, as shown in the following equation (t-ratios in parentheses):

$$g^{i}_{Y,t} = 15.5 - 4.5 \log_{10}(1 + \pi^{i}_{t-1}) - 7.80 \log_{10}(1 + \pi^{i}_{t}) \qquad \ldots (2)$$
$$(3.6) \quad (-4.6) \qquad\qquad\qquad (-7.9)$$

N = 175, $R^2 = 0.61$, i = 1, 2…..25

$$\log_{10}(1 + \pi^{i}_{t}) = 1.4 - 0.01 g^{i}_{Y,t-1} - 0.04 g^{i}_{Y,t} \qquad \ldots (3)$$
$$(5.3) \quad (-2.2) \qquad\qquad (-9.2)$$

N = 200, $R^2 = 0.53$, i = 1, 2…..25

In these two equations, $g_{Y,t}$ is the percentage change of GDP in year t and π_t is the percentage inflation rate, divided by 100, in year t. N is the number of observations and i the number of the country. For the purpose of estimation, both g_Y^i and π^i have been weighted by the square root of the countries' share in total GDP, expressed in terms of PPP dollars.[205] These estimates indicate that last-year's inflation reduces current growth and last-year's fall in output increases current inflation. However, the tightest association is between current output falls and current inflation. This evidence supports the view of the transformational recession as being essentially of the stagflation type, whereby both output falls and inflation increases had to a significant extent common causes.

The policy mix required to achieve disinflation under such circumstances is one of a tight fiscal policy combined with an accommodating monetary policy. The disinflation process may also have to be gradual to accommodate more easily large changes in relative prices. In practice, disinflation was swift only in Croatia. In the central European and Baltic countries – with the exception of Romania in 1993 and 1997 and Bulgaria in 1997, which experienced strong inflation reversals – the disinflation process has been more or less gradual. However, most CIS countries failed to keep their budget deficits under control and, consequently, experienced periods of very high inflation, even hyperinflation. As already noted in section 3.2, in those countries the recession has been prolonged and the recovery either has been modest or has not yet materialized. Thus, in practice, the clear failure of macroeconomic policy was limited mainly to the CIS countries in the years 1992-1994 (in Tajikistan and Turkmenistan this continued in 1995).

At the advanced stage of transition, the rate of disinflation is constrained by international capital mobility, which limits the freedom of central banks to set and maintain interest rates much above the world level. The attendant dilemmas are well known. If the exchange rate is fixed, a restrictive monetary policy induces capital inflows, as borrowers substitute foreign for domestic debt and foreign investors buy domestic assets. The sterilization of such inflows is possible but expensive, and therefore has its limits. If the exchange rate is floating, capital inflows induce an appreciation of the domestic currency. This helps to reduce inflation in the short term, but may also lead to a large current account deficit and, therefore, increases the risk of a sudden devaluation and higher inflation in the medium term. Borrowers in transition economies have little experience in estimating the exchange rate risk. Misjudgements are especially likely when expectations are being formed during prolonged periods of real effective appreciation. The appreciation trend is a feature of transition and is sustained by several factors, the two crucial ones being depressed exchange rates at the starting point and rapid improvements in productivity and rates of return during the subsequent transition. Productivity improvements are particularly rapid in countries where reforms have been successful. Such countries are also credible candidates for membership of the European Union and, for that reason, attract more FDI than others, giving further support to the appreciation. Such circumstances call for an interest rate policy that is not very restrictive, and place an even bigger burden on governments to conduct a restrictive fiscal policy. However, if such a fiscal policy is not adopted, any attempt to disinflate quickly by means of highly restrictive monetary and exchange rate policies, may easily backfire, as it would cause a large current account deficit which may at some point trigger a crisis of confidence and result in stagflation. A short-term gain in the rate of disinflation is then obtained at the cost of an increased risk of macroeconomic instability. During the run up to EU membership, short-term foreign debt tends to increase rapidly. It is therefore prudent during this period to keep international reserves high and increasing, even if this concern about stability causes a certain slowing down of the rate of disinflation.[206]

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[204] S. Gomulka, "The IMF-supported programs of Poland and Russia, 1990-1994: principles, errors and results", *Journal of Comparative Economics*, Vol. 20, No. 3, 1995, pp. 316-346.

[205] For a linear system of the form: $y_j = \sum a_i x_{ij} + e_j$, the standard ordinary least squares (OLS) estimates of the parameters a_1, $a_2 \ldots a_n$ minimize $\sum (y_j - \sum a_i x_{ij})^2$. Weighted OLS estimates minimize $\sum w_j (y_j - \sum a_i x_{ij})^2$ or $\sum (w_j^{1/2} y_j - \sum a_i w_j^{1/2} x_{ij})^2$, where $\sum w_j = 1$. This is equivalent to estimating a system in which the original variables are rescaled by the square roots of their respective weightings.

[206] These issues are discussed comprehensively by several authors in Z. Drabek and S. Griffith-Jones (eds.), *Managing Capital Flows in Turbulent Times: The Experience of Europe's Emerging Economies in Global Perspective* (Armonk, NY, M. E. Sharpe, 1999).

(vi) What lessons can be drawn for those transition economies still struggling to achieve macroeconomic stability and economic growth?

The lessons which I propose to draw from these 10 years of transition are as follows:

(i) Most former SOEs, especially the large ones, have suffered from the British Leyland/Rover syndrome: the accumulation of structural problems of such magnitude that they are not amenable to significant "strategic" restructuring nor capable of rapid growth whatever their new ownership and regulatory framework. Given the financial, managerial and other constraints, and poor positive incentives, such enterprises – unless taken over by large foreign investors – are mainly capable of only "defensive" restructuring;

(ii) The success of transition depends above all on the rapid creation of conditions – institutional, legal, microeconomic and macroeconomic – which are conducive to the development and growth of a new private sector, domestic and/or foreign;

(iii) This development of this new sector is facilitated by increased competition through price liberalization, permitting SOEs to sell capital assets, imposing hard budget constraints on them, encouraging FDI and lowering the entry barriers to new businesses. The number of these businesses outside of agriculture should be about 0.5 million per 10 million of the population, and the small- and medium-size enterprises should eventually account for some 50 to 60 per cent of GDP;

(iv) The inflation rate need not, and initially should not, be very low, but it must not be high (not more than 40 per cent per annum), and it should be seen to be converging to the EU level;

(v) A disinflation policy should involve all the key macroeconomic components: fiscal, monetary, the exchange rate and (when applicable) wages and benefits. Given the close link between budget deficits and money growth in transition countries, a tight fiscal policy is necessary. But it may not be sufficient, and other policies should be used in supporting roles. The cost of disinflation is lower if the monetary authorities are politically independent. Although an extreme solution, currency boards can be useful;

(vi) The choice of an exchange rate regime is not very important from the point of view of an anti-inflation policy, but it helps to have, at some point, a moderately or even fully flexible regime, in order to provide the private sector with better information about the exchange rate risk and so establish a better defence against speculative capital inflows and an excessive growth of private foreign debt;

(vii) The essential institutional basis for a stable macroeconomic environment includes, apart from an independent central bank, a solid regulatory framework for financial institutions: banks, insurance and pension funds and stock exchanges;

(viii) To attract foreign direct investment and eliminate capital flight, external credibility is vital. In order to build up this credibility, the exchange rate should be competitive most of the time to ensure that international reserves are high in relation to imports and foreign debt, especially short-term debt;

(ix) Fiscal policy, in order to be consistent with the stability objective, should aim to meet the Maastricht criteria with respect to the general government budget deficit and public debt. However, if the policy is also to serve developmental objectives, it should additionally aim to keep taxes (and therefore public expenditures) low in relation to GDP and, within public expenditures, should favour spending on education and infrastructure at the expense of social transfers, defence and subsidies;

(x) The high rate of structural unemployment requires changes in the labour code to increase flexibility of labour markets, e.g. by reducing hiring and firing costs. It also requires an active role of governments in education and training.

These 10 lessons overlap with the following conclusions reached by Wyplosz in his own recent survey: it has paid to start early and move fast; macro-stabilization is a prerequisite for growth; the exchange rate regime is largely irrelevant for disinflation; and microeconomic foundations/structural reforms are important for both stability and growth.[207] But the additional matters that I am emphasizing are the links between policies and the growth of the new private sector, and the importance of the exchange rate policy for competitiveness, credibility and stability.

Recent comparative empirical studies of enterprise performance, in CIS countries on the one hand and in the more successful countries on the other, attempt to identify the key underlying factors. According to Johnson, McMillan and Woodruff, macroeconomic stability is not sufficient for private sector growth, and an essential institutional feature for entrepreneurship to develop is the presence of a legal system sufficiently strong to secure property rights.[208] Such a feature, however, is probably only one of several necessary conditions. After all, the legal system is the same throughout Hungary or Poland, but private sector development is still weak in the countryside and small towns, and heavily concentrated in the capitals and major cities where the supply of labour skills and infrastructure facilities is high and where there are more individuals with entrepreneurial abilities.

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[207] C. Wyplosz, *The Ten Years of Transformation: Macroeconomic Lessons*, CEPR Discussion Paper, No. 2254 (London), March 2000.

[208] S. Johnson, J. McMillan and C. Woodruff, "Entrepreneurs and the ordering of institutional reform: Poland, Slovakia, Romania, Russia and Ukraine compared", *The Economics of Transition*, Vol. 8, No. 1, March 2000, pp. 1-36.

(vii) What are the long-term growth prospects for transition economies?

In most of these countries, the institutional reforms of the 1990s have created a microeconomic and institutional environment conducive to the effective use of their entrepreneurial capital. In such countries, the magnitude of international technology transfer can be assumed to be related positively to both capital accumulation and the development gap. This transfer may also be expected to be greater in countries that have succeeded in creating and maintaining a stable macroeconomic environment.

Elsewhere I have reported the results of an empirical test of such propositions, using the post-Second World War data for 20 countries in western Europe, Latin America and the Pacific rim.[209] These regression results are as follows:

$$\begin{array}{lllll} g_Y=-2.22 & +0.195(I/Y) & +5.63\log_{10}(y^{US}/y) & -5.92\log_{10}(1+g_p) & \\ (-3.6) & (7.9) & (14.5) & (-6.8) & \ldots\ (4) \end{array}$$

where t-ratios are indicated in parentheses, and where $R^2=0.80$. In this relationship, the time unit is a 10-year period, and g_Y is the percentage growth rate of GDP, I/Y is the gross investment/GDP ratio, y is the per capita GDP at purchasing power parities, and g_p is the percentage rate of inflation (of the GDP deflator) divided by 100, all variables being 10-year averages.

In the regression equation (4), $\log(1+g_p)$ equals approximately g_p (expressed as a fraction of 100), so it tells us that an increase in the trend rate of inflation by a percentage point reduces the trend growth rate of GDP by 0.06 per cent. The inflation rate is strongly correlated with the inflation variance, so the latter may also serve as an instrumental variable for instability factors.

For those transition economies which are EU candidates, the ratio y^{US}/y equals about 4, and $\log_{10} 4=0.6$. Thus, according to this Gomulka-Dumas equation, the catching-up factor could contribute about 3.4 percentage points to their current growth of GDP. For a EU candidate country with an I/Y ratio in the range of 20 to 25 per cent and an inflation rate of 10 to 15 per cent, the growth equation predicts a GDP growth rate ranging from 4.7 per cent (for I/Y equal to 20 per cent and $g_p=15$ per cent) to 5.8 per cent (for I/Y equal to 25 per cent and $g_p=10$ per cent). A further increase of the I/Y ratio by 5 percentage points, to 30 per cent, would raise the growth rate to 6.8 per cent and a reduction of the inflation rate by 7 percentage points, to 3 per cent, would raise it further to 6.9 per cent. However, after a decade of growth at between 5 to 7 per cent, the ratio y^{US}/y would decline from the present level of 4 to about 3, reducing the contribution of the catching-up factor by 0.7 percentage points, and reducing the growth rate from 6.9 per cent to 6.2 per cent, by the year 2010.

This exercise is not intended to provide precise estimates of the growth rate for specific time periods and specific countries. The purpose is rather to estimate the potential trend growth rate on the basis of the broad and long-term experience of a group of countries thought to be representative of medium-developed and market-based economies.

The estimates reported in table 3.3.2 should be interpreted in this spirit, as an indication of the possible growth rate for the countries listed over the next 50 years, given the declining role of the "advantages of backwardness" factor. Policy options are represented by two savings ratios.

The important role of capital accumulation in this growth projection is indicated by an implicit assumption that international technology transfer is proportional to investment. This assumption may be realistic when the technological gap is large, in the first 20-30 years of the projection. In the closing years of the period, declining returns to capital must set in, so the projection in table 3.3.2 is then less realistic.

After the first decade of transition, domestic savings tend to be low in most transition countries. This is so, essentially, for two reasons: the inherited policies of large social transfers and the negative effect on incomes of the transformational recession. Following the first wave of reforms (liberalization, stabilization and privatization), the transition countries can turn to implementing reforms and policies intended specifically to promote savings. These include pension reforms, whereby state pensions are sharply reduced and private pension schemes established, and tax reforms intended to lower sharply both subsidies and direct taxes on individuals and companies.

The European Union candidates should also be able to attract foreign direct investments in volumes that are significant in relation to GDP. The macroeconomic risks to investors could be reduced further, and substantially, once the new EU members become a part of Euroland. When this happens, and only then, domestic savings should no longer be a constraint on investment, and hence no longer a constraint on growth.

Public investments have a significant contribution to make in promoting growth in all those areas in which positive externalities are present. These include, typically, physical infrastructure, research and education. Public spending in these areas has been radically curtailed during the first decade of the transition. A reduction of social transfers is also needed for the purpose of reversing this trend.

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[209] S. Gomulka, "Growth convergence: a comment on Warner", London School of Economics, 1999, mimeo (forthcoming in a book edited by L. Orlowski, to be published by Elgar).

TABLE 3.3.2

GDP growth and relative GDP per capita for selected transition economies
(United States GDP per capita = 1)

	s=20						*s=30*					
	0	*10*	*20*	*30*	*40*	*50*	*0*	*10*	*20*	*30*	*40*	*50*
Russia												
g_Y	..	4.66	4.09	3.65	3.29	3.02	..	6.24	5.34	4.63	4.07	3.63
$Y_t/(1.02)^t$	0.22	0.29	0.36	0.43	0.50	0.55	0.22	0.34	0.49	0.65	0.81	0.96
Poland												
g_Y	..	4.33	3.83	3.44	3.13	2.89	..	5.91	5.08	4.42	3.91	3.50
$Y_t/(1.02)^t$	0.26	0.33	0.40	0.47	0.53	0.58	0.26	0.39	0.54	0.70	0.86	1.01
Ukraine												
g_Y	..	6.03	5.17	4.50	3.97	3.55	..	7.61	6.43	5.49	4.75	4.16
$Y_t/(1.02)^t$	0.11	0.17	0.23	0.31	0.38	0.45	0.11	0.20	0.31	0.46	0.62	0.78
Czech Republic												
g_Y	..	3.37	3.07	2.84	2.66	2.52	..	4.94	4.32	3.82	3.43	3.13
$Y_t/(1.02)^t$	0.41	0.48	0.54	0.59	0.64	0.68	0.41	0.57	0.73	0.89	1.04	1.18
Hungary												
g_Y	..	3.77	3.39	3.09	2.86	2.67	..	5.34	4.63	4.07	3.63	3.28
$Y_t/(1.02)^t$	0.34	0.41	0.48	0.54	0.59	0.64	0.34	0.49	0.65	0.81	0.96	1.11

Source: Author's estimates on the basis of equation (4), and under the assumption that the United States GDP per capita will be increasing at a constant rate of 2 per cent per annum.

Note: 1998 is the initial year, t denotes years from 1998, s is the investment/GDP ratio in per cent.

(viii) Concluding remarks

In all the transition countries covered by this paper, the liberalization and stabilization measures of the 1990s have been fundamental in helping to foster a rapid expansion of the new private sector, a contraction and restructuring of the state sector, and a profound reorientation and rapid growth of international trade. In most of these countries, GDP per capita was about 15 to 30 per cent of the level in the United States at the beginning of the twentieth century, and is still at about the same level at the end of the century. The economic transformation of the last decade has contributed significantly to meeting the strategic aim of creating an economic system that should enable these countries to make substantial progress in closing this income gap in the twenty-first century.

Dramatic macroeconomic imbalances and extraordinarily large structural distortions have been the key problems that the 25 post-socialist countries of central Europe and the former Soviet Union inherited and have had to face and solve during the first decade of their transition. The reform packages which most central European and Baltic countries have adopted, broadly corresponded to the severity of the macroeconomic crisis and the magnitude of these inherited structural problems. They aimed at regaining macroeconomic stability quickly, rapidly liberalizing prices, trade and entry, and establishing an infrastructure of institutions and laws capable of servicing a well-functioning, competitive market economy. The reform strategy adopted by most of the CIS countries embraced considerable, but less extensive PTE liberalizations, and placed rapid privatization before macroeconomic stabilization. In those countries structural distortions were initially larger, private sectors smaller, and earlier market reforms more limited. These more hostile initial conditions had a major impact on reforms, policies and the progress of transition. However, the differences in reform strategies between the two groups of countries and within each group narrowed considerably in the second half of the 1990s.

Discussion of chapter 3

3.A George Kopits

This retrospective survey addresses a number of important macroeconomic questions in the decade of transition from socialist central planning. Leaving aside some presentational points, let me expand the coverage of Professor Gomulka's paper and elaborate with regard to five interrelated issues: impediments to macroeconomic stabilization; shock therapy versus gradualism; stabilization and growth; policy prescriptions; and finally, the role of the IMF in the transition.

Impediments to stablization

A key to our understanding of the lack of effectiveness of traditional macroeconomic policy tools in the early stages of the transition is the absence of a fully developed transmission mechanism (broadly defined), which is taken more or less for granted in a market-based economy. In turn, the development of transmission channels rests on institution building.[210]

While, from the very outset, interest rate policy has been useful in influencing the saving behaviour of households, it was totally impotent in containing borrowing by state owned enterprises as long as the latter were not subject to a hard budget constraint and bankruptcy risk. Likewise, bank lending could not be affected in the absence of market-based instruments and effective regulation and supervision of financial institutions. As a fallback, quantitative credit limits were used (with apparent success) to restrict enterprise borrowing; however, nothing impeded these enterprises from financing themselves by accumulating inter-enterprise credits and tax arrears, a process much like excessive monetary expansion. Exchange rate policy, normally utilized (through a devaluation) to induce a switch in consumption from tradeables to non-tradeables and in production from non-tradeables to tradeables, was not particularly effective in the presence of price controls which prevented the pass-through from world prices to domestic prices.[211]

Fiscal targets, in the form of reductions in the budget deficit, were largely ineffective in containing the public sector borrowing requirement (PSBR) as long as the central budget deficit represented only a part of the PSBR, the rest being accounted for by numerous extra-budgetary accounts and local governments, which escaped any attempt at fiscal discipline. Moreover, excessive emphasis on cash accounting resulted in reliance on payment arrears (including of wages and pensions) to meet budget deficit targets.

In the face of such impediments to stabilization through traditional tools, it was necessary to improvise by resorting to crude proxies to implement macroeconomic stabilization. One such tool was tax-based incomes policy – preferably in the form of a highly progressive tax on increases in the wage-bill, such as Poland's *popiwek,* to encourage some efficiency in employment – as a substitute for the missing hard budget constraint. Admittedly, this proxy was exposed to considerable erosion over time. More generally, the combination of an undeveloped transmission belt and the lack of reliable parameter estimates (given an insufficient track record of stable behavioural and technological relationships) often led to application of a higher dosage than would normally be required of the available measures to achieve a specified macro target.

Nevertheless, it is interesting to observe how far some of the advanced transition economies have moved since the beginning of the transition in this regard. For example, the recent adoption of inflation targeting by a few of these countries would have been unthinkable without some stability in the nexus – albeit still being tested – between interest rate policy and inflation.

Shock therapy versus gradualism

This issue has not only attracted considerable attention in policy-making and academic circles, but also in the popular press. Professor Gomulka correctly views the former East Germany as an extreme case of shock therapy as it moved from being a paragon of disciplined central planning to full EU membership, and to full participation in the EMS, practically overnight. Yet, apart from this rapid opening-up process, the shock came mainly in the form of the wage adjustment encouraged by west German unions (undoubtedly to protect jobs in their own ranks). Coupled with massive budgetary transfers, this led to what might be regarded as one of the worst cases of Dutch disease, with the resultant loss in competitiveness and huge structural unemployment.

Far less obvious, however, is the shock therapy experienced by the tradeables sector in some of the more advanced economies in transition, such as Hungary. In fact, far from being a case of gradualism, as it is often characterized,[212] Hungary moved faster and went farther than most other transition economies in implementing key structural reforms: trade and investment liberalization, price liberalization, freedom of entry, and adoption of strict bankruptcy provisions. As a result, a number of large manufacturing SOEs engaged in traditional exports to the CMEA (for example, Videoton, Ikarusz, MOM) or in import substitution (coal mining, construction material) were practically dismantled in the early stages of the transition. This is reflected in the high unemployment rates and sharply declining employment in these activities during the period 1992-1995 (table 3.A.1). By contrast, employment remained practically unchanged in public administration, education, health care and public utilities – covering more than one fourth of the labour force.[213]

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[210] For an earlier discussion, see G. Kopits, "Monetary and fiscal management during the transformation", in H. Blommestein and B. Steunenberg (eds.), *Government and Markets* (Dordrecht, Kluwer, 1994), pp. 231-246.

[211] This phenomenon was already present in the pre-transition stabilization programmes in Hungary and Romania.

[212] See, for example, K. Dervis and T. Condon, "Hungary – partial successes and remaining challenges: emergence of a 'gradualist' success story?" in O. Blanchard, K. Froot and J. Sachs (eds.), *The Transition in Eastern Europe* (Chicago, Chicago University Press, 1996).

Exposure to market prices and the risk of bankruptcy disciplined the remaining enterprises (both privately and publicly owned), while the skilled labour force released by the defunct or shrunken enterprises was absorbed by foreign affiliates of multinational firms that began operating in Hungary, often in the form of greenfield investments, attracted by an investor-friendly environment that offered relatively stable and transparent rules of the game. Meanwhile, restructuring of the non-tradeables (mainly public) sector lagged far behind in a number of transition economies, including Hungary.[214] Needless to say, over time, the workforce in this sector has become politically eloquent in defence of acquired rights, delaying the completion of the transition process. Indeed, to this day, reform of the health care, pension, and educational systems, remains an unfinished agenda in most of the economies in transition.[215]

Stabilization and growth

As a corollary of the above two-track transformation process, macroeconomic policy tools have become more effective in the (mainly tradeables) sector that had not been sheltered from market forces, namely, in activities exposed to trade liberalization, foreign direct investment, price liberalization and bankruptcy risk. By the same token, institution building in the form of enhanced corporate governance, supported by the implementation of a commercial code, accounting and audit practices, a broad-based parametric tax system, and more recently, effective regulation and supervision of banking and securities markets, all constitute an indispensable framework for effective macroeconomic stabilization.

TABLE 3.A.1

Unemployment and employment by activity in Hungary, 1992-1995
(Per cent)

	Unemployment rate (per cent of labour force)		*Employment (per cent change)*
	1992 QI	*1995 QI*	*1992 QI-1995 QI*
Tradeables sector			
Agriculture, forestry, fishing	9.8	14.2	-37.5
Mining	9.0	16.5	-40.2
Manufacturing	10.7	11.9	-19.7
Food products, beverages, tobacco	9.8	14.6	-25.7
Textiles, clothing, leather	9.9	11.1	-14.4
Wood, paper and printing products	9.8	9.7	-21.9
Chemicals	8.8	7.0	-9.2
Non-metallic mineral products	16.3	14.4	-23.5
Metallurgy, metal processing	11.7	16.0	-22.2
Engineering	11.4	11.3	-24.0
Transportation services	6.9	7.8	-9.4
Non-tradeables sector			
Electricity, gas and water supply	6.1	5.7	-5.5
Construction	19.7	18.3	-1.5
Domestic trade	8.1	9.3	-0.7
Lodging and food services	13.1	13.1	4.0
Postal, telecommunications services	4.1	4.0	-4.0
Financial insurance and services	1.5	4.3	22.0
Real estate, rental activities	8.4	6.8	-0.3
Public administration	5.5	5.9	14.0
Education	2.2	2.7	8.4
Health and social services	4.7	3.9	-1.1

Source: G. Kopits, "External implications of social and labour market policies", *International Economy* (in Hungarian), November 1995, pp. 65-73.

Obviously, it was in the tradeables sector where the transformation translated most rapidly into high and sustained growth. More generally, the growth performance during the transition is to be viewed as the weighted average of output decline in obsolete activities and of output surge in reformed activities. This, of course, is subject to an important measurement caveat: the fact that for various reasons the former has been recorded much more reliably than the latter explains a downward bias in published output performance.

Professor Gomulka correctly suggests that stabilization and growth tend to be mutually reinforcing, largely through a fall in the risk premium, which reflects increased policy credibility and time consistency. In turn, this leads to a surge in foreign direct investment inflows that, following a gestation period, are a major catalyst to growth in transition economies. Whereas initially inflows of direct investment finance imports of capital goods and semi-finished products, over time they result in import substitution or export creation, as local value added rises, with consequent productivity spillovers and externalities in the rest of the economy.

On the author's empirical analysis, it would be more convincing to venture beyond the equation estimates presented in section 3.3(v) of the paper, perhaps by attempting a fuller specification – allowing also for the influence of institutional factors – of the determinants of the key performance variable, namely, economic growth.[216] Incidentally, the use of the estimates presented in the paper to answer the query raised in the subtitle ("What are the long-term growth prospects…?") is highly questionable.

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[213] Except for the elimination of the workers' militia, government employment was virtually unchanged from 1989 through 1995. G. Kopits, "External implications of social and labor market policies", *International Economy* (in Hungarian), November 1995, pp. 65-73.

[214] Privatization of most public utilities and much of the banking system in 1995-1996 was an important step in the transformation of the non-tradeables sector.

[215] Clearly, redesign of these systems (i.e. eligibility for benefits, co-payments, quality of services, etc.) represents only part of the reform; the other, equally intractable, is the trimming and replacement of the existing unionized workforce.

Ultimately, a major issue that needs to be addressed is the manner in, and extent to, which public policy can influence growth. For one thing, during the transition, important obstacles to growth have been the fiscal or quasi-fiscal wedges, comprised of high payroll tax rates for social security, in the labour market, and high financial intermediation costs, in the capital market. These wedges can be reduced through social security reform and bank restructuring, respectively. In addition, a decline in the public sector deficit and of indebtedness permits a fall in interest rates and seignorage, which in turn will permit a further reduction in financial intermediation costs.[217] Overall, cuts in these wedges will lead to high and sustained growth via familiar channels by raising the efficiency in resource utilization and potential growth – including through previously unexploited economies of scale. However, these determinants can only be effective if the institutional framework – which should provide clear and reliable rules of the game, including a hard-budget constraint – mentioned above is already in place.

Policy lessons

Apart from some general prescriptions, the paper is not altogether persuasive in some of its policy recommendations. In particular, adoption of the Maastricht reference values might not be useful as an immediate policy goal for most economies in transition. Although perhaps informative as an accounting device, the debt equation (or identity) shown in the paper is of limited usefulness as a rationale for the fiscal reference values currently in place. In fact, under the Stability and Growth Pact, the focus is on the pursuit of budget balance or surplus over the cycle, as distinct from the 3 per cent of GDP deficit limit intended to accommodate the operation of automatic stabilizers. Compliance with the balanced budget target should also help reduce the debt-GDP ratio. In more general terms, most of the numerical goals suggested in the paper seem somewhat arbitrary.

The norms of macro probity listed in the paper should be prescribed with an important caveat, especially following the experience of some economies in transition, notably the Czech Republic, where either explicitly or implicitly excessive priority had been assigned to displaying an attractive (almost Potemkin-like) macroeconomic performance until the collapse of the Klaus government. In particular, there should be a clear message that price stability, low unemployment, and high growth should not be pursued at the cost of postponing much needed structural reform. Thus, for example, at times it may be necessary to accept that relative price adjustments may translate into an inflationary spurt in the absence of effective tools of monetary restraint. By the same token, an insufficiently developed tax system may force temporary reliance on a moderate inflation tax, and, of course, enterprise restructuring cannot be pursued without a significant unemployment rate.

Role of the Fund

Professor Gomulka describes what he regards the "standard IMF approach" as anchored with "an incomes policy and a fixed exchange rate, in addition to restrictive monetary and fiscal policies" (section 3.2(iii)). However, in fact, Fund-supported programmes in the economies in transition have encompassed a wide variety of exchange rate regimes, including currency boards, different types of peg (fixed, crawling) subject to various band widths, as well as floating regimes. Monetary policy has been guided by alternative operational objectives: quantitative credit limits, inflation targeting, key interest rate setting, etc. Fiscal targets have spanned moderate deficits to surpluses. Although in general there was a clear promotion of trade liberalization, a number of programmes allowed for a temporary import surcharge, mainly for revenue reasons. Some programmes contained an explicit wage commitment, while most of them did not.

The only common denominator in Fund-supported programmes has been that they be cast in a consistent macroeconomic framework, with the purpose of achieving a sustainable growth objective – that is, sustainable under the external constraint faced by a given country. However, unlike market-oriented economies with a track record that yielded parameter estimates of key technological and behavioural relationships, in the economies in transition such parameter values were unknown or missing. Hence the need to assume plausible parameter values, such as a unitary velocity of money. Also, given the lack of appropriate institutional arrangements, especially a hard budget constraint and bankruptcy risk for enterprises, it was necessary to resort to second-best instruments, such as tax-based incomes policy, for containing domestic demand pressures.

3.B Silvana Malle

A decade of transition policy and reforms in central and eastern Europe and the CIS provides the opportunity for an overall assessment of the process and results obtained to date. It should also provide an insight into the policy mix that distinguishes successful from unsuccessful transition experiences. This is what the economics profession is currently trying to work out and Gomulka's paper is an excellent example of stocktaking of transition reforms.

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[216] S. Fischer, R. Sahay and C. Vegh, "Stabilization and growth in transition economies", *Journal of Economic Perspectives*, Spring 1996, pp. 45-66, and the more recent attempt to incorporate the effect of institutional factors in O. Havrylyshyn and R. van Rooden, *Institutions Matter in Transition, but so do Policies*, IMF Working Paper WP/00/70 (Washington, D.C.), March 2000.

[217] G. Kopits, "Midway in the transition", *Acta Oeconomica*, 1994, pp. 267-292.

Gomulka's paper is generally non-controversial and largely reflects the orthodox view of the transition process. However, while one can broadly agree with the generalizations expressed in terms of lessons from transition, the devil is in the details. And these should not be underestimated both for a sober assessment of what has been achieved so far, the difficulties of the transition process and the challenges which lie ahead in most countries.

In avoiding speculation about future challenges, the paper does not address the issue of whether transition can be considered to have been completed in most of the central European and Baltic countries that adopted the ideal model formulated by Vaclav Klaus as described by Gomulka. In other words, the paper does not discuss whether, from a macro-structural point of view, these countries are now fully equipped to face the challenges of globalization and further integration in the world economy and so able to withstand external shocks that could impair the apparent achievement of sustainable growth. The different repercussions of the international and Russian financial crises on the transition economies could have offered a test of the adequacy of (and I believe by and large support for) Gomulka's analytical basis for assessing the comparative success of transition policies in each country.

While Hungary and Poland ended 1999 with comparatively robust GDP growth rates of 4.5 and 4 per cent, the modest and narrowly based recovery of growth in the Czech and Slovak Republics, stagnation in Latvia and output falls in Lithuania and Estonia (-4.2 and -1.4, respectively) point to a higher degree of vulnerability to external shocks and underlying structural weaknesses.

That structural reforms are a necessary component of transformation is widely accepted, but the fact they need time to deliver results is often overlooked. Gomulka's emphasis on the role of the new private sector in promoting the conditions for sustainable growth, a conclusion supported by the experience of Poland, is correct, but somehow disjointed from the analysis of the conditions for the development of this sector. Incidentally, one should note that comparisons in this area are also difficult due to the different methodologies used in the statistical estimates. In some central and east European countries, for instance, individual private activity is included in the estimates, while in Russia it is not.

Gomulka's point is that (fast) privatization did not matter for the development of the new private sector. Nevertheless, the mode of privatization mattered. The liquidation and separation of assets from SOEs helped the formation of physical capital to start new business in Poland. But this may be only part of the answer. Two basic questions remain: (a) why has the new private sector developed in some countries, particularly in Poland and Hungary, while it is lagging far behind in the CIS? Is this the result of harder budget constraints on state enterprises and divestment of assets, micro-liberalization and structural reforms, or is it due to better institutions, a more friendly business environment, less corruption? How important is the credibility of the government?; and (b) why, after a decade of transition, have even the successful transition countries a much lower density of small- and medium-sized enterprises compared with more advanced economies? The most advanced economies have around half a million enterprises per 10 million of population: the problem for transition economies that lag much behind is how to reach this threshold. Gomulka's analysis does not help in drawing policy lessons in this field. Liberalization policies are necessary, but they may not suffice. Experience suggests that positive and visible developments start taking place only after a critical mass of reforms is in place, and policy interactions are favourable. But progress in transforming the real sector of the economy is slow in general, and catching up with advanced market economies in this area is likely to take a long time.

We also cannot exclude the possibility that initial (or country-specific) conditions matter, *ceteris paribus*, for creating a virtuous dynamics of growth. Country specifics come to mind in particular if China – which Gomulka does not discuss, although he makes a cursory reference to the latter's path of gradual adjustment – is brought into the picture. While SOEs in China have remained by and large unrestructured, under a largely unreformed political system, a new "private sector" including foreign funded enterprises has emerged and accounts comparatively more for the dynamics of growth. While one could argue that the Chinese diaspora has been crucial in providing FDI to mainland China – a missing factor in central and eastern Europe (although one may ask whether funding from Polish émigrés in the United States has not played a somewhat similar role in Poland) – other conditions must have been in place to convince foreign investors of Chinese origin to invest in China rather than elsewhere. In this context, the Chinese government's commitment to stabilization and the creation of conditions conducive to the growth of the new private sector, a commitment that Gomulka finds also in central and eastern Europe, seems to have played a role. But, contrary to the latter countries, the legitimization and credibility of reform in China was provided neither through a democratic political process nor by the collapse of the communist system.

Concerning central and east European countries, one should not forget that both Poland and Hungary had moved towards liberalization and market-oriented reforms earlier in the 1980s. A comparatively advantageous geographic position and exposure to western developments and ideas also contributed to the collapse of communism and to the increased political debate that preceded the radical changes of 1989. A new leadership started to emerge in the 1980s and was crucial in speeding up economic transformation in the 1990s.

If initial conditions do, indeed, matter, the question is to what degree should economic policy and institutional change be tailored to these specific conditions, as distinct from the generic mix of lessons for unsuccessful transition economies listed by Gomulka. In other words, the fundamental question is not whether the government should stabilize, consolidate the budget and create a good institutional environment for business, but *how* it should proceed in trying to do this under different conditions in different economies.

These questions are important for the CIS, whose transition paths are not thoroughly analysed in the paper. Gomulka concludes that CIS and central European countries have converged in the second half of the 1990s, basing his conclusion on the fact that the macroeconomic indicators of the two groups of countries are converging. This is, indeed, hard to believe, especially after the ripple effect of the Russian crisis throughout the former Soviet Union in 1998-1999. In some countries the reliability of official data is still questionable, but there are basic economic issues in all of them that have yet to find a solution. These include the timely payment of budgetary wages and pensions, a minimum degree of compliance with tax regulations, the use of national currency in domestic settlements, just to mention a few areas of concern – whereas these are no longer issues in central Europe. Their structural weaknesses do not justify optimism as to the sustainability of macro-stabilization policies in the CIS.

How countries should proceed in order to transform their economies leads me to draw attention to three points, among the 10 lessons for transition listed by Gomulka, and which he discusses in more detail in separate sections of his paper: the monetary and exchange rate policy, the Maastricht criteria, and the flexibility of labour markets.

In discussing monetary policy at the earlier stages of transition, Gomulka argues that some central banks used credit limits in order to avoid increasing real interest rates by too much. But he does not explain the rationale of this policy in a transition context, where, indeed, the problem was that inefficient and underdeveloped banking systems, together with the established links between large state enterprises and banks, would not have allowed interest rates to allocate lending according to creditworthiness. Credit rationing did not reduce the cost of credit, since the "shadow cost" of credit with rationing is higher than the actual real interest rate, but it did prevent continued lending to unviable enterprises. This policy, therefore, amounted to introducing somewhat harder budget constraints, in default of normal "market" discipline. In heavily indebted countries, however, this policy, by smoothing tensions over interest expenditure in the budget, may have reduced the pressure for sound fiscal management and contributed to an increased level of public debt. The increases in interest rates, after the demise of credit limits were by and large resisted by the fiscal authorities, the more so as they got used to easy budget financing. In that context, the independence of the central bank was crucial to withstanding these counteracting pressures.

Gomulka is correct in pointing out the need for an exchange rate anchor in transition economies. However, the discussion of this section would have benefited from better organization and greater clarity about the different types of "peg" adopted in the region; fixed exchange rates, crawling pegs, fixed parity and reference currency – dollars or deutsche marks or a combination of these currencies. Each exchange rate policy had, and continues to have, a different impact on the sustainability of short-term capital inflows, disinflation and fiscal management. This, in turn, raises the question of when and how far liberalization of capital movements should be allowed: a topic of major debate after the last international financial crisis which also needs to be addressed in drawing lessons for less successful transition economies.

The discussion of the exchange rate policy does not sufficiently emphasize the more stringent requirements of the currency board compared with a fixed exchange rate policy. While fixed exchange rate regimes still allow the central bank to carry out monetary policy and use monetary instruments, the whole idea of a currency board is that the country is really committed to a fixed parity and does not intervene in the monetary market. The currency board is thus fundamentally different from the normal fixed, but adjustable peg. What is also important to stress is that the failure of a currency board involves much greater systemic risk to the banking system than does exit from a normal pegged exchange rate regime. Therefore, while lower interest rates will reduce the immediate pressure on the budget, as Gomulka notes, the indirect role of the currency board should also be one of inducing sound fiscal management and preventing the accumulation of new debt. This, in turn, demands pursuing macro-structural policies, which are conducive to rapid productivity improvements and adequate budget revenues. If the economy as a whole fails to adjust to the straitjacket of the currency board (which would be evident through large current account and budget deficits in some "successful" transition countries), the fiscal adjustment needed to maintain the currency board could be very demanding and socially disruptive.

This leads me to the next point: the Maastricht criteria. By and large, these criteria may provide a benchmark for government policy, but in themselves they do not suggest how policy should proceed to meet these requirements. Should the policy be one of slashing expenditure or increasing revenues? What is the right balance between the two? The specificity of each country, where demographic trends also matter, needs to be taken into account. Transition economies also need to be aware that watching the general budget deficit (central and local budgets plus extra-budgetary funds) is not sufficient if the underlying problems of the public sector at large are not forcefully dealt with. In many countries (including some of the so-called successful ones), banks and large-scale enterprises (whether strategic or not) are still state owned. The accumulation of liabilities in these sectors will be reflected, sooner or later, in the general government deficit, through tax and social contribution arrears and costly bank consolidation schemes. Thus, the interdependence of macro-structural reforms and management is crucial. The Maastricht criteria alone are not enough to do the job.

Finally, the point made by Gomulka on the need for labour market flexibility is more one of principle than practice. Labour markets in most transition countries are, indeed, rather flexible, particularly if compared with most EU countries. Dramatic structural adjustments have taken place that would be unthinkable without labour market flexibility. But more should be done to increase regional labour mobility within each country since unemployment is often concentrated in particular areas. Some countries have tried to tackle this problem by setting up free economic zones and special arrangements whose prospects are, at best, unclear. While there is need for better education and training to cope with the mismatch of skills and vacancies, as advocated by Gomulka, information, communications and transport infrastructures should also receive proper attention.

3.C Joze Mencinger

I have been participating in the endless transition discussions for more than a decade, first as an active participant, then as an observer. The discussions continue although the old division between shock therapists and gradualists has been replaced by the division between those who are happy with the results and those who are not; the former are optimists and the latter pessimists when future developments are being discussed. My comments are divided in three parts: a rather superficial discussion of the paper by Professor Gomulka is concentrated in the first; the second deals with the sustainability of growth in the central European countries; and major features of the rather specific transition in Slovenia are presented in the third.

Professor Gomulka's paper presents a valuable overview of macroeconomic policies in the transition process. Let me therefore address only those interpretations with which I disagree.

Was the transition a success or a failure, and in either case, why? Contrary to the author I share the opinion of Professor Stiglitz that the rapid speed of transition based on the Washington Consensus was a major mistake.[218] The transition from a socialist to a market economy, a counterpart to sweeping political and ideological changes, began without a clear assessment of the actual situation, without a fully worked out picture of the new economic system, and without suitable economic and social arrangements in place. Instead, there were explicit or implicit assumptions that the elimination of deformed non-market institutions, the restoration of market and private ownership, together with a laissez-faire free market mechanism, would instantly transform socialist countries into welfare states. New, mostly inexperienced governments were assisted by international financial institutions and western scholars who, in most cases, had learned about these countries from tourist brochures and journeys from the airports to Holiday Inn hotels. In addition, many domestic radicals and foreign advisers were ideologically and politically motivated, their major goal being the abolition of socialism and existing institutions rather than the gradual creation of a viable economic system and increased economic prosperity for everybody. In short, the previous "prevention of capitalist exploitation" ideology was replaced by what George Soros called "market fundamentalism".

Privatization was considered to be the cornerstone of transition; it was assumed that it would improve efficiency in the use of resources, enable fairness in the distribution of wealth and welfare, and contribute to the abolition of the mono-party system. The efficiency assumption of private property is rightly taken for granted; private property is a necessary condition for economic efficiency, but it is not sufficient if there are no owners responsible for the proper use and maintenance of capital assets. They cannot be created by decree. The validity of the second assumption, namely, that privatization will create fairness in the distribution of wealth and welfare is dubious, to say the least. Fairness is an extremely ambiguous concept (see the discussion on the social consequences of transition in Michael Ellman's paper in this *Survey*) as illustrated, for example, by the enormous variations in the degree of social protection provided by pensions and health care, even among the most developed welfare states. It is also true that the dominance of private property rights is a proper basis for a stable political democracy. However, new political and economic elites, created in the transition, and foreign investors have given a new meaning to what is proper privatization; in short, it should increase their political legitimacy, wealth and profits and these, therefore, became the criteria for evaluating the performance of ownership "restructuring". Actual privatization procedures therefore reflected the specific distribution of political power and the ideas of randomly chosen western "privatizers"; their privatization schemes however exhibited one common characteristic: they were grandiose administrative operations exceeding the dreams of central planners.

The creation of private property rights is only one step in the formation of a "normal" capitalist market system. The legal framework and market institutions which enable the "invisible hand" to replace administrative controls is also needed. Formally, the legal framework and market institutions similar to those existing in the developed market economies could be established quickly. Yet, the existence of such structures does not imply that the problems have been overcome; the development of market institutions in the west has been a gradual process of interactions between economic development, politics and the institutions of civil society and it is unlikely that formally the same institutions in a new market economy will operate just as they do in the developed market economies. The performance of market institutions crucially depends on norms and patterns of social behaviour.

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[218] J. Stiglitz, "Whither reform", paper presented at the World Bank Annual Bank Conference in Development Economics (Washington, D.C.), 1999.

For many reasons it is practically impossible to group the transition economies according to transition models. The commonly used division in a vast literature of "transformatology", between "shock therapy" and "gradualist" models, does not provide a basis for their classification. First, the patterns of transition were various mixtures of systemic changes and economic policies, some of which could be considered as elements of a gradualist approach while others could be considered as components of a shock therapy. Second, what was a shock for one country, for example price and trade liberalization, could be an element of a gradualist approach or even one of the initial conditions in another country which had had less price control or which had previously been rather open. The three-model grouping suggested by Professor Gomulka – namely, the shock therapy model followed by the former east Germany; the gradualist model presumably followed by the CIS countries; and the rapid adjustment model presumably followed in central Europe – does not provide a better classification. Furthermore, allocating a country to a particular transition model on the basis of the outcome of the transition and claiming, for example, that acceptance of the rapid adjustment model generated the relative success of the central European countries while adoption of the gradualist model led to failure in the CIS countries, is superficial. What really matters are the initial conditions; most CIS countries simply did not possess the institutions – or even memories of such institutions – required to introduce the elements of the rapid adjustment model. Indeed, one could argue that transition economies, particularly those in the CIS, have not followed any consistent model but rather have implemented a chaotic mixture of systemic changes and economic policies.

But let me turn to macroeconomic issues. I believe that the assessments of initial macroeconomic conditions in the central European and CIS countries were false from the very beginning. The so-called "monetary overhang" and shortages which existed in socialist economies disappeared overnight, eliminated by high inflation or hyperinflation, while basic policy prescriptions were based on the assumption that aggregate demand exceeded aggregate supply. Stabilization was therefore directed at closing the gap between demand and supply through restrictive monetary and credit policy, and rapid liberalization of foreign trade and prices, while anchoring the exchange rate and restraining wages and government spending. Such policies deepened the transformational depression,[219] and pushed more goods into the category of "pure socialist production goods" thus destroying domestic manufacturing industry and transforming many countries, notably Russia, into becoming providers of raw materials, and most of the other CIS countries without raw materials into third world countries. Luckily, due to social resistance, most countries were unable to follow this flawed advice.

I agree with Professor Gomulka that too much stress was placed on stopping inflation in central Europe but I do not think that, in the initial stage of the transition, there was any relationship between growth and inflation, monetary policy and inflation, or budget deficits and inflation. In short, I am not convinced by his equations (2) and (3), although I would agree with his conclusion that falling output and inflation had common causes. I also very much agree with his assertion that the success of transition depends above all on the creation of the institutional, legal, microeconomic and macroeconomic conditions; the problem is that they cannot be created overnight. I also have problems with the theoretical foundation of the Gomulka-Dumas growth equation and its econometrics. This brings us to perspectives and sustainability of growth.

Let me start with the growth figures in tables 3.2.2 and 3.2.3 of Gomulka's paper. They are presented in chart 3.C.1 which indicates that in the central European countries the transformational depression bottomed out in 1993; there followed a short period of recovery which ended in 1996 when growth rates began to decelerate and then to stagnate at the level of production prevailing at the start of the transition. What about the CIS countries? Have they reached the bottom of the transformational depression? After a long period of decline, they grew by a modest 1 per cent in 1997, which was followed by further decline in 1998 and another 1 per cent increase in 1999.

Discussion about the sustainability of growth in the CIS countries would appear to be premature, so let us therefore concentrate on the central European countries alone, i.e. on the 10 most successful applicants for EU membership. Inflation, interest rates, exchange rate regimes, the existence of financial institutions, financial deepening, the liberalization of capital flows and the state of privatization are among the most commonly used criteria in judging their performance, although they have proved to be at least questionable as most dramatically shown by developments in Russia or the Czech Republic. Instead, the macroeconomic performance of central Europe should be judged much more by the sustainability of growth in relation to the current and capital account. This is the criterion used in what follows: sustainable or intrinsic growth is defined as the growth of GDP increased by the share of the current account balance in GDP. This is thus the growth which an economy attains without reliance on foreign assistance, foreign loans or the sale of assets to foreigners. The usefulness of foreign "assistance" in the form of loans, acquisitions, portfolio or direct investments, with which a country may finance its current account deficit and development, is thus not discussed at all, while methodological problems related to double counting are neglected.

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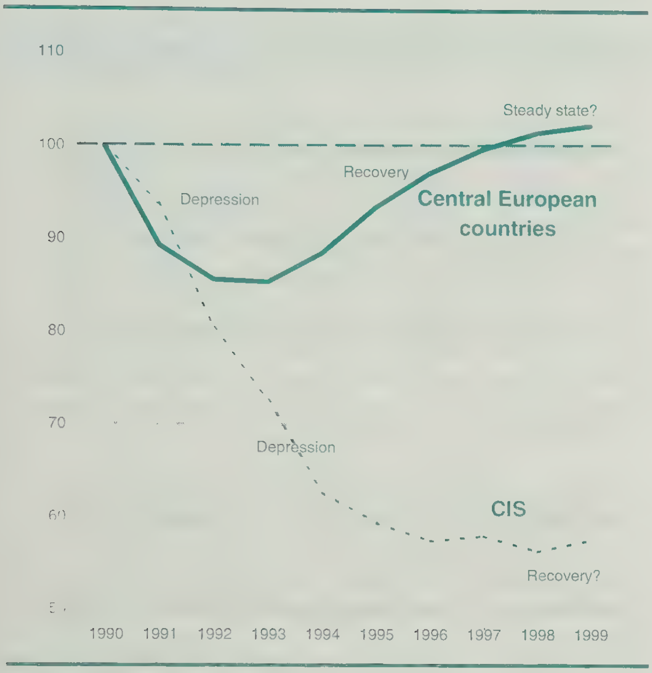
[219] J. Mencinger, "Lessons from the transition process", *Empirica*, No. 20, 1993, pp. 189-204.

CHART 3.C.1

What after transition, 1990-1999

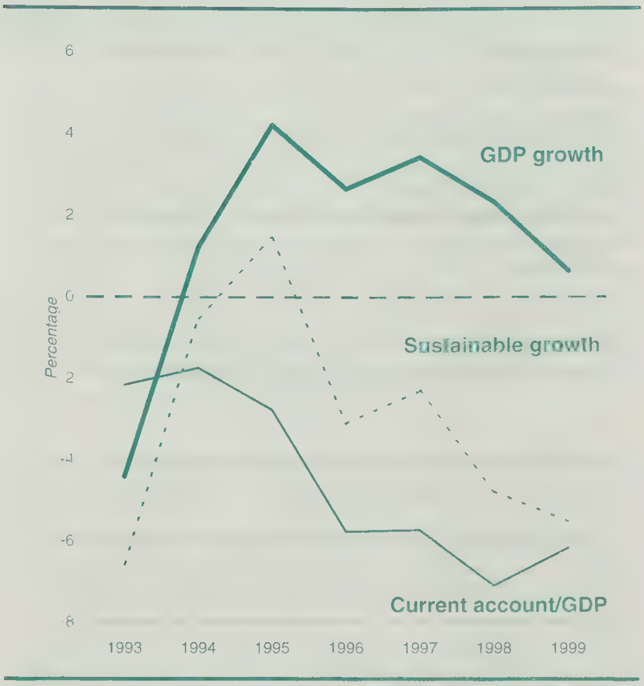


Source: Tables 3.2.2 and 3.2.3.

CHART 3.C.2

Sustainability of growth, 1993-1999

(Per cent)



Source: EIPF (Ljubljana), statistical series, various issues.

The combination of GDP growth and the current account balance in GDP for 10 countries has been changing from year to year. In 1993, which marks the end of Kornai's "transformational depression", four countries combined a decline in GDP with a current account deficit, two combined output decline with a surplus, in two growth was accompanied by a deficit, and two countries combined growth with a surplus. In 1994, four countries combined growth with a surplus. Since 1995, the shift to a combination of growth with current account deficits indicates that the applicant countries have relied more and more on foreign savings to finance their current account deficits. In 1997, only Slovenia maintained growth without a deficit on the current account, while in 1999 Slovenia was the only country where GDP growth exceeded the current account deficit in GDP.

The dynamics of these changes are shown in chart 3.C.2, where two broken lines represent average GDP growth and the share of the current account balance in GDP, and the solid line the sum of both variables, thus revealing the dynamics of sustainable or intrinsic growth as defined above. In short, the rather modest growth of GDP in the applicant countries which followed recovery from the transformational depression has been accompanied, since 1995, by a constant worsening of the current account; sustainable or inherent growth began to decline already in 1996. This is a warning that the vitality of the central European economies, i.e. their ability to grow without reliance on foreign savings, is weak and fading, a development which casts doubt on the assumption of convergence. In fact, the existing gap between the EU and central Europe might even widen rather than diminish, making a delayed accession even more difficult than a "premature" one.

Let me turn to my country. Slovenia, when part of Yugoslavia, shared its advantages and disadvantages which arose from a rather specific economic and political system. Many of the essential conditions for a successful economic transition were, at least partly, met before 1989: enterprises were autonomous, basic market institutions existed and the government used some standard economic policy tools. Slovenia was by far the richest part of eastern Europe with a homogeneous, socially stable population, a diversified manufacturing sector, a predominantly private agriculture, a partly private service sector, well-established economic links with western markets and a favourable geographic position among its advantages (table 3.C.1).

The controversy of "shock versus gradualist" changes in the economic system arose in Slovenia during the preparations for independence and immediately afterwards. The "shock therapists", supported by foreign advisers, suggested an overwhelming package encompassing price stabilization, a fixed exchange rate, a balanced budget, administrative restructuring of manufacturing industry and the banking system, and centralized privatization. Gradualists, on the other hand, suggested decentralized privatization, gradual construction of missing market institutions, and a flexible economic policy based on floating the new currency. It was hoped that such a policy would result in a smaller loss of output and lower rates of unemployment at the expense of some inflation. Pragmatism and gradualism

TABLE 3.C.1

Macroeconomic performances of Slovenia, 1992-1999

(Per cent, million dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
GDP real growth	-5.4	0.9	4.9	4.1	3.5	4.6	3.9	4.9
Unemployment rate *(per cent)*	11.6	14.4	14.4	14.0	13.9	14.4	14.5	13.5
Unemployment rate, ILO *(per cent)*	9.3	9.0	7.5	7.3	7.3	7.4	7.9	7.3
Exports of goods *(million dollars)*	6 681	6 083	6 828	8 350	8 370	8 407	9 095	8 608
Imports of goods *(million dollars)*	6 141	6 501	7 304	9 304	9 252	9 179	9 870	9 765
Trade balance *(million dollars)*	540	-418	-476	-954	-882	-790	-775	-1 157
Current account *(million dollars)*	759	192	600	-23	39	37	-4	-581
Inflation *(yearly averages)*	201.3	32.3	19.8	12.6	9.7	9.1	8.6	6.6
Public expenditures/GDP	43.1	46.2	46.8	45.7	45.2	44.6	45.6	46.0
Exchange reserves *(million dollars, end of year)*	1 164	1 566	2 764	3 426	4 124	4 377	4 767	4 103
Foreign debt *(million dollars, end of year)*	1 741	1 873	2 258	2 970	4 010	4 176	4 959	5 491

Source: Bilten Banke Slovenije, *Statistical Yearbook* (Ljubljana), various issues.

prevailed both in relation to economic policy and to changes in the economic system.

Slovenia has also been far less eager to attract foreign capital than other former socialist countries, which can be explained by the relative wealth of Slovenia's population and the outcome of privatization. On the other hand, foreign investors have not been queuing to enter the country: Slovenia's market is too small and real wages are too high.

An independent central bank (Bank of Slovenia), the prompt introduction of a floating exchange rate and benign neglect of inflation were the cornerstones of a successful stabilization, while the small currency area in absolute and relative terms and its sensitivity to economic performances in other countries have been the main obstacles to a sound monetary policy. During the initial period of consolidation, the Bank of Slovenia managed to determine the appropriate amount of money for the new country and to lower inflationary expectations. The budget has remained roughly balanced. When the squeeze in economic activity reduced public revenues and increased the need for social transfers, it was impossible to bridge the gap by running a budget deficit: financing it by printing money was ruled out, domestic savings were low, and borrowing abroad would further strengthen the tolar and reduce competitiveness. Consequently, the share of public revenues (taxes and contributions) in GDP had to increase and it stayed high. The tax structure was gradually changing, the replacement of sales taxes by VAT, after many postponements, being finally introduced in July 1999.

The economic development of Slovenia can also be divided into three distinct periods: the "transformational depression" of 1991-1993, the "recovery of 1993-1995", and a "steady state" thereafter. Independence had predictable economic effects induced by the dramatic reduction of trade with the former Yugoslav republics. Production declined by 9.3 per cent in 1991 and 6.0 per cent in 1992. Consequently, total employment fell by 5.6 per cent in 1992 and by 3.5 per cent in 1993. The so-called restructuring of the economy consisted mainly of "firing and retiring"; the number of unemployed nearly quadrupled in three years, reaching 137,000 in the last quarter of 1993; the number of pensioners doubled over the same period to 408,000. Both demanded enormous social transfers and the share of public expenditure in GDP increased to 48 per cent. At the same time a switch from the former Yugoslav to the "genuine" foreign market led to a trade surplus in 1992, which was a joint result of increased exports and a large fall in imports, the latter due to the contraction in domestic demand and the breaking of links with the rest of Yugoslavia.

In 1993, the country reached the bottom of the depression. GDP increased slightly, and turned to growth of 4 per cent in 1994. While the period of rapid recovery ended in 1995, macroeconomic performance in the first decade of the country's existence can be considered satisfactory. Growth stabilized at some 3-4 per cent a year, unemployment acquired European characteristics based on asymmetric employment patterns,[220] prices have been gradually stabilized and the budget has remained roughly balanced. A surplus in services, until 1999, offset the deficit in trade, and foreign exchange reserves have until recently matched the foreign debt.

The double transition in Slovenia, from a socialist to a market economy and from a regional to a national economy, was accompanied by structural changes, from manufacturing towards services and from large towards small enterprises. Restructuring has been gradual, disorganized and managed by enterprises themselves. In the first period, the essence of restructuring consisted of "firing and retiring" combined with ad hoc government interventions in cases of large enterprises in trouble. Social stability has remained an important characteristic of Slovenia; it was founded on the regional dispersion of industry which, together with limits on land holding, has created part-time farmers as an important social group.

J. Mencinger, "Generating employment in economies of transition", in H. Pfusterschmid-Hardtenstein (ed.), *Die Zerrissene Geselschaft* (Vienna, Ibera Verlag, 1999), pp. 209-225.

In short, it can be claimed that gradualism, pragmatism, and risk aversion in the wake of the devastation of the old system have created the proper mix for a rather successful transition in Slovenia.

3.D Leonid Grigoriev

When the problems of transition were being discussed at the end of the 1980s and early 1990s their complexity was not fully appreciated. We are now looking for the logic of transition, for the reasons behind each country's success or failure, and, indeed, for the definition of success. Professor Gomulka's paper takes a substantial step forward in bridging formal economic growth analysis and institution building. This has become a very topical issue over the past year. The very questions he asks are a clear sign that the econometric analysis of macroeconomic factors is important but not sufficient for understanding the transition process.

Is the resumption of economic growth a sufficient sign of a successful transition from plan to market or should we be looking for something more fundamental? In this respect I would support Ivan Berend's criticism of the implicit assumption that "…sustained economic growth and catching up with the west is an automatism, which starts to work when a country adopts the western market model".[221] The definition of success – from my point of view – should reflect at this point (after just 10 years) more progress in institution building than in GDP growth: to what extent have countries come close to building market institutions, to securing the basis of long-run, sustainable growth, to meeting global challenges (competition) and utilizing their national human capital. I agree with Professor Gomulka's definition of success as the "ability to recreate the (institutional, legal and economic) conditions for rapid and sustainable growth", but it is still too general to be instrumental. I would add that countries in transition have their own development agenda and will be looking for their own place in the global economy as soon as the immediate objectives of transition to democracy and the market economy have been achieved.

I want to make a short comment on the initial conditions in the CEE and CIS countries. Table 3.2.1 (after some recalculations) shows us the average GDP per capita (PPP value) in CEE countries in 1998 as $7.6 thousand versus $4.9 thousand in the CIS. Even allowing for the steeper decline in the CIS it highlights a visible historical difference between the two groups of countries. Poland, of course, is dominating the first group (with 34 per cent of the group's total GDP). As might be expected, the most successful transitions have been in the Czech Republic, Hungary, Poland and Slovenia (respectively, $12.5, $10.2, $7.7 and $14.3 thousand). Russia dominates the other group with 69 per cent of total GDP (by PPP value). Russia has a per capita GDP of $6.4 thousand and is struggling along. So, it is probably safe to assert that initial conditions matter. Implementation of the 10 commandments is unlikely to be universal across the region, given the differences in economic level and in the state of civil society at the start of transition.

The distinction between CEE and CIS countries should also take into account the well-forgotten collapse of the USSR. The CMEA countries experienced the external shock of simultaneously opening their economies and the destruction of their intra-CMEA ties in the early 1990s. The former Soviet Union republics had to adjust to yet another shock at the very start of transition. The economic and human resources of the newly independent countries varied considerably, as did their ability to manage their economic and social problems. The economic and social costs of a country's collapse need to be considered in a broader context – the lack of national banks and currencies were not the only problems. The collapse of countries was probably not envisaged in the 10 commandments.

The speed of institution building is now at the centre of international discussion. In the early 1990s the international financial institutions considered institution building as something coming after the initial economic reforms and strengthening them. Now the attitude is changing – the speed of a caravan depends on the lame camel. It is clear that reforms cannot wait for institution building; but without adequate institutions certain reforms cannot be sustained. The financial crisis of August 1998 in Russia is a good but not unique example of this. It is probably impossible to find a general solution to this problem. But in each field or industry the reformers must make all possible efforts to secure an adequate institutional basis for the reform.

Professor Gomulka makes an excellent distinction between the sequencing of privatization and macro-stabilization in the CEE and the CIS countries. He points out that privatization in the CIS was generally carried out rapidly but "before the full liberalization … [and] the hardening of budget constraints and disinflation". Obviously this contrasts with the slower and, I would add, more careful and traditional privatization in the CEE countries (with the exception of the Czech Republic). I agree with the key notion that: "The quality of privatization has proved to be very important, and that there is a trade-off between speed and quality". Here I have two questions. What prevented reformers in the CIS from understanding this simple notion from the very beginning? And why did early privatization in the CIS not help to tighten budgetary constraints for enterprises, which is what one would expect from theory: what was wrong, the reasoning or the techniques of privatization and its sequencing?

Another factor I would like to introduce into consideration of the outcome of reforms in the two groups of countries is the difference between the countries' economic structures. I cannot go into details here, but we should take into account the specific structure of the Russian and former USSR economies.

See chap. 2 of this *Survey*.

L. Grigoriev, "To a new stage of transformation", *Voprosy Economiki*, No. 4 (Moscow), 2000; and "The results of economic transformation of Russia in the 1990s", *Survey of Economic Policy in Russia in 1999*, Bureau of Economic Analysis (Moscow), 2000, chap.1.

I call it "the triangle economy" to reflect two huge sectors of the economy, which are to a large extent specific to the USSR and Russia – fundamental sciences and defence, and the exporting, natural resource industries. My point is that the objective features (markets, sources of financing, etc.) of these two sectors and the subsequent interests of their owners (managers) are very different from those of general civil manufacturing, services and agriculture. This factor alone is enough to make the transition in Russia (and the CIS) quite different from the CEE countries. Quite a number of Russian economists believe that the blessing of natural resource endowments has not helped the transition in Russia.

Finally, the Russian economic crisis has dominated the CIS region, with Russia continuing to subsidize a few countries. It is hard to envisage rapid growth in the other CIS countries before a Russian turnaround. The unfortunate end of the macro-stabilization in Russia in 1997-1998 in the financial crash was due to the incomplete institutional transformation, delayed structural reforms and obvious miscalculations. But the crash brought economic policy back to a more rational framework at the expense of the collapse in the banking system. A fast turnaround in 1999-2000 in Russia would support the argument that economic policy matters but that there is no single, correct approach to institution building, macroeconomics and sequencing.

CHAPTER 4

STRUCTURAL CHANGE IN THE TRANSITION ECONOMIES, 1989-1999

Michael Landesmann

4.1 Introduction

A paper on "structural change" in transition economies should start with a discussion, or at least a definition, of what is meant by structural change. For the purpose of this paper structural change is referred to in two ways:

- changes in compositional structures (of output, employment, exports, etc.);
- changes in behaviour: we can think of this as changes in the ways different variables relate to each other, such as output-employment relationships or FDI-import/export dynamic, etc.

The issue of structural change is, of course, of great relevance to transition economies as fundamental "regime changes", particularly those which transform the basic principles of allocation, as well as changing external economic relationships (from a largely autarkic CMEA bloc towards external liberalization), induce change in both these senses. Furthermore, there are a number of relationships which attract the economist's interest in "structural change":

- the relationship between "economic structure" and the level of economic development;
- "economic structure" as an indicator of a country's position in the international division of labour;
- "structural change" as an indication of an economy's dynamism or lack of dynamism (and, in the case of transition economies, of the speed and direction of its transformation towards a well-functioning market economy).

We shall refer to all the above issues, although mostly not in a rigorous manner, in the following sections of this paper, which point to some of the important structural features in transition economies and their development over the past decade. The analysis in this paper is restricted to a subsample of transition economies, namely the central and east European countries (CEECs) – with the exception of the Baltic states – which are currently also candidate countries for EU accession. While it would be interesting to extend the analysis to a wider range of transition economies, we were restricted by the use of a disaggregated database, which allows reliable cross-country comparative analysis of patterns of structural change.[223] Furthermore, we shall only deal with a subset of issues which come under the heading of "structural change": the focus of the analysis will be on changes in the structures of production, employment and in the positions of CEECs in the European division of labour, i.e. on the CEECs' international specialization. We shall leave out important topics such as institutional change, changes in the geographic pattern of economic activity, micro-/firm-level changes and changes in income and wealth distribution. All these are essential issues in a fuller analysis of structural change in transition economies, but they cannot all be squeezed into one overview.

The structure of the paper is as follows: section 4.2 presents the broad patterns of sectoral change, i.e. the processes of de-agrarianization, deindustrialization and tertiarization which have taken place since the beginning of transition. Section 4.3 looks at the broad picture of developments in employment levels, participation rates and unemployment. Section 4.4 reviews some of the evidence on industrial restructuring and shows some interesting intercountry and interindustry differences in this respect. Section 4.5 examines whether we can detect patterns of convergence in structure with different groups of EU economies. Section 4.6 reviews the development of interindustry and intra-industry specialization of CEECs in international trade with the EU. Section 4.7 reports the results of an econometric analysis of patterns of industry level catching up, the first part dealing with catching up in productivity levels and wage rates, and the second with catching up in product quality (measured by export unit values at a very detailed product level). Section 4.8 discusses the role which FDI plays in industrial restructuring and in the process of industrial specialization of the central and east European (CEE) economies. Section 4.9 summarizes some of the main results and concludes with some remarks on the possible impact of EU accession on patterns of structural transformation and further east-west European integration.

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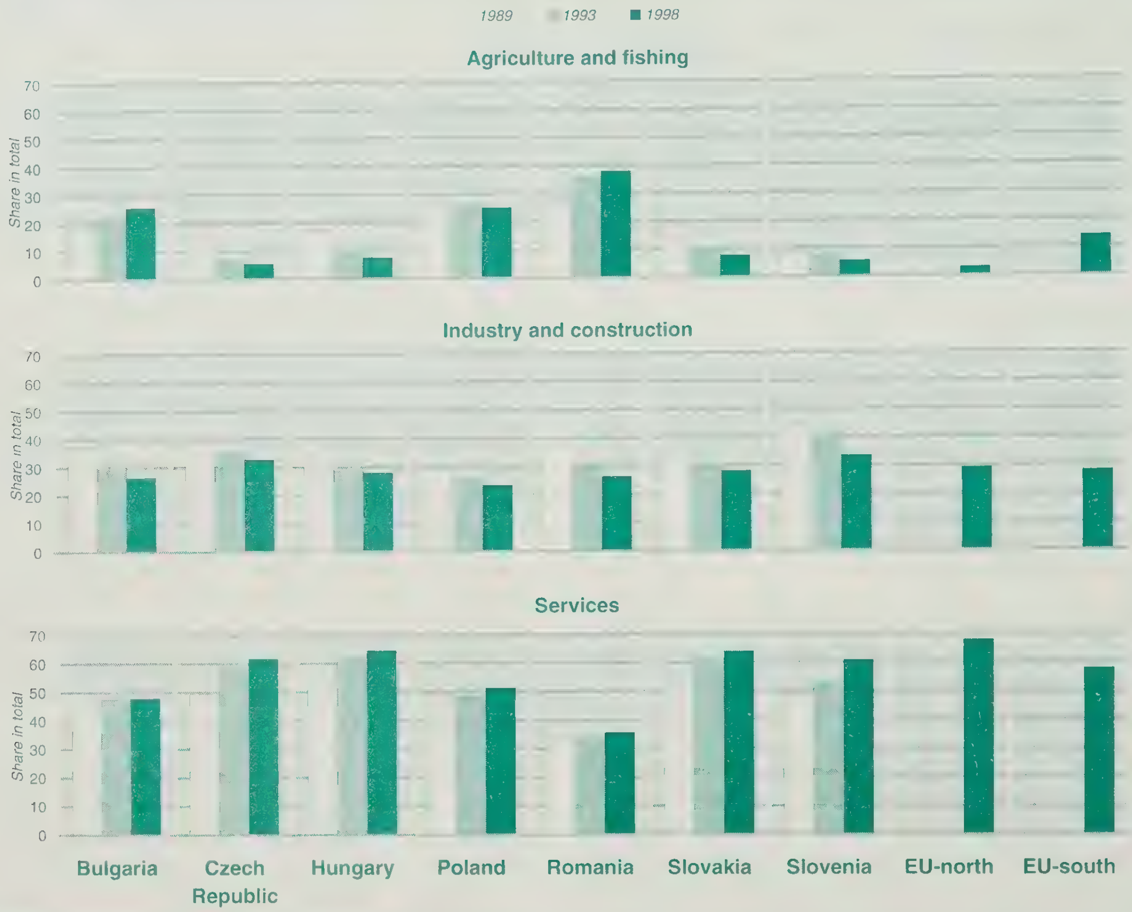
[223] The database upon which the analysis in this paper mostly relies is The Vienna Institute for International Economic Studies Industrial Database (WIIW-IDB).

CHART 4.2.1

Comparison of CEECs' employment structures in 1989, 1993 and 1998 with those in the EU
(Percentages)



Source: WIIW Industrial Database incorporating national statistics.

4.2 Broad patterns of structural change

In this section the patterns of structural change which have taken place in the CEECs at the broad sectoral level are briefly reviewed.

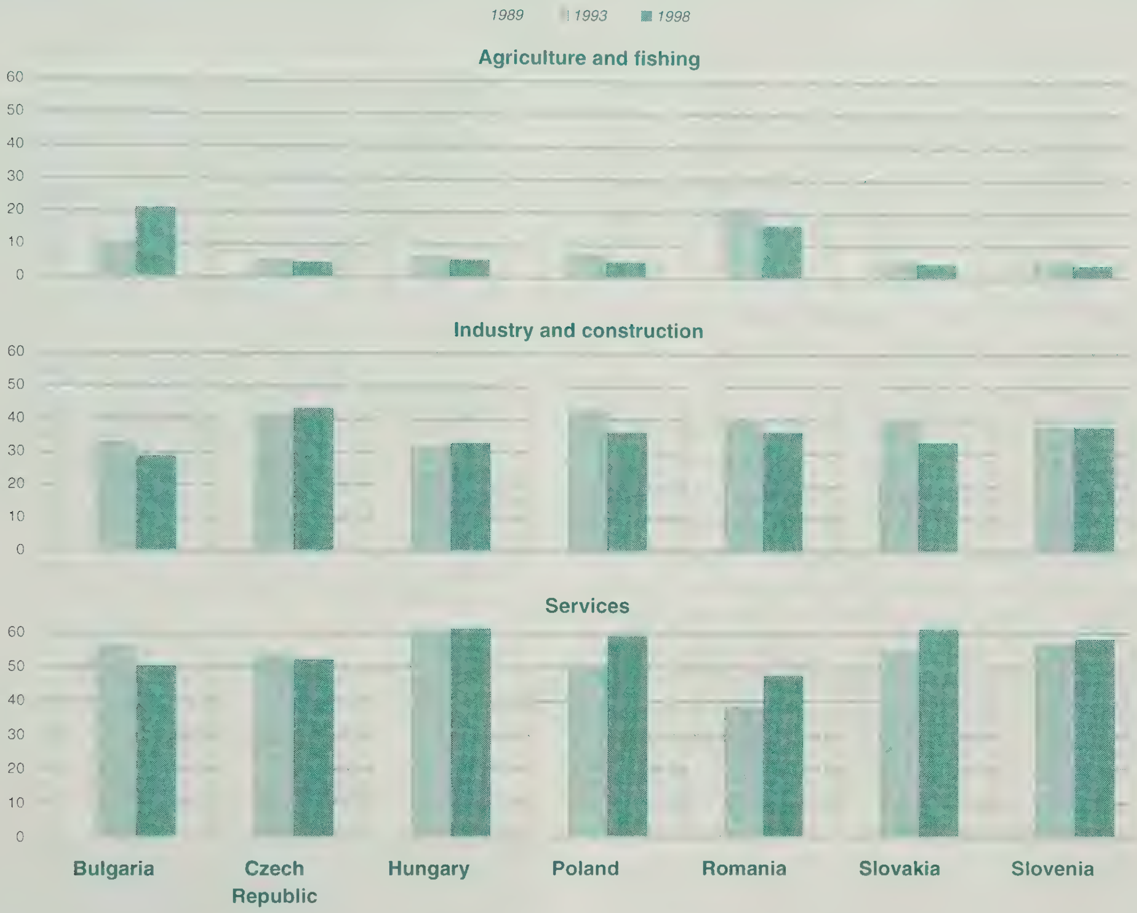
Charts 4.2.1 and 4.2.2 show the evolution between 1989 and 1998 of the shares of the three classical sectors (agriculture, industry, services) in value added and employment respectively; chart 4.2.2 also allows a comparison of the sectoral composition between the CEECs and two groups of EU countries, the "EU north" (composed of Belgium, France, Germany and the United Kingdom) and the "EU south" (composed of Greece, Portugal and Spain). The following tendencies can be observed.

(i) De- and re-agrarianization

While there was a tendency in most of the CEECs to reduce the size of the agricultural sector, there are exceptions to this: in some economies the share of the labour force in agriculture (and in Romania even the absolute number) has increased; this is true for Bulgaria and Romania, while for all the other CEECs there are falls in the share (and dramatic losses in absolute numbers) of agricultural employment. Interestingly, in the economies with the larger agricultural sectors (Bulgaria, Poland, Romania) percentage declines (or even increases) in the employment shares of this sector were smaller than in the countries which started off with a smaller agricultural sector (Czech Republic, Hungary, Slovakia, Slovenia). Hence, regarding the "primary sector", the transition brought about processes both of "de-agrarianization" as well as – in some countries – of "re-agrarianization". The latter should be considered a transitory phenomenon, resulting from the severe employment crisis in the industrial sector (especially in countries such as Bulgaria and Romania) and the, so far, limited absorption capacity in the services sector. There are also interesting discrepancies in the movements of value added shares and employment shares in agriculture: the shares of agriculture in value added were also declining in the most recent period in those economies in which there were previously signs of "reagrarianization" (Bulgaria and Romania); this development supports the view that the phenomenon mainly reflects the dramatic overall jobs crisis in these countries.

CHART 4.2.2

Value added structures in the CEECs,1989, 1993 and 1998
(Percentages)



Source: WIIW Industrial Database incorporating national statistics.

(ii) Deindustrialization

Broadly, one can speak of a general process of "deindustrialization" with falling absolute employment levels in the industrial sector (comprising manufacturing, mining, water and electricity supply, and construction). In terms of share, however, there are some interesting exceptions to the general decline of employment in the industrial sector. In Hungary the shares of employment in the industrial sector have recovered after an initial drop at the beginning of the transition and value added shares have risen in Hungary and the Czech Republic and stabilized in Slovenia. In relation to both the EU north and the EU south, some of the CEECs maintain, at the end of the first decade of transition, a high share of manufacturing/industry in both the value added and employment (for employment shares see chart 4.2.1). There are differences in the value added and employment shares: the Czech Republic and Slovenia, followed by the Slovak Republic and Hungary are the countries with the highest employment shares in industry, while the Czech Republic, Slovenia and Romania, followed by Poland, are those with the highest shares in value added. These differences reflect, of course, differences in relative sectoral productivity levels, e.g. the extremely low productivity level in Romanian agriculture raises industry's share in value added in spite of its own low level of productivity. The levelling off of relative employment losses in manufacturing in some of the CEECs (such as Hungary and Poland) and the persistence of manufacturing's relatively high share of value added could be an indication of the attractiveness of some of the CEECs as locations for some of Europe's industries within the context of an overall European division of labour. We shall return to this issue in later sections of this paper.

(iii) Tertiarization

As regards the "tertiary sector", there are clear signs of a catching-up process of the CEECs in the relative size of this sector (although, as in the west, the changes are partly due to statistical reclassifications and the outsourcing of service activities previously undertaken within the other sectors). Again, the relative increase of the importance of the service sectors in the CEECs over the last decade has not necessarily been in line with the size of the initial gap (relative to the west European employment structure). Thus, in countries such as the Czech Republic, Hungary, Slovakia and Slovenia, there were very substantial increases in the shares of the services sector, while in Bulgaria, Poland and Romania, where the initial shares of the services sector in overall employment were relatively low, the increases in shares were rather modest. In absolute terms, the employment gains in the services sector were far from sufficient to compensate for the employment losses in the other two sectors.

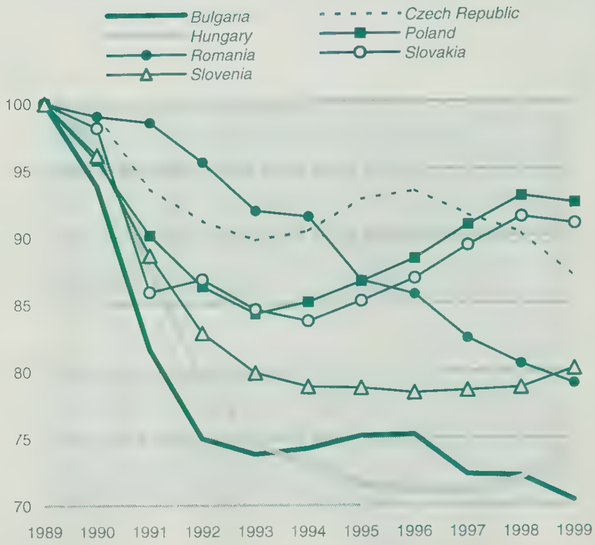
4.3 Employment, participation rates and unemployment

Structural shifts as well as the overall macroeconomic developments since 1989 have fundamentally affected overall employment levels, participation rates and unemployment. The falls in total employment since the beginning of the transition were very substantial (see chart 4.3.1). They were concentrated in some countries (Hungary, Poland) in the early phases of the transition, 1990-1993, while in others, such as Romania and Slovakia, there were also substantial declines after 1993. The relationship between GDP growth and employment (see table 4.3.1) reveals big changes between the periods 1990-1993 and 1993-1999 and also great diversity across countries in terms of relative GDP growth and the responsiveness of employment to GDP growth.

The large cumulative employment drop in the CEE region is reflected in falling labour force participation rates in all CEECs since the beginning of the transition.[224] A comparison between the transition countries covered here and the EU-15 shows that, despite considerable falls in the initial period of transition, participation rates are higher than the EU average (68 per cent) in the Czech Republic, Romania and Slovakia, similar to the EU-15 level in Poland, and lower than in the EU in Bulgaria and Hungary. Employment rates (total number of employed relative to the population aged 15-64) also vary considerably, from close to 70 per cent in the Czech Republic and Romania (in 1998) to 54 per cent in Hungary. A comparison of employment rates in the CEECs and the EU in 1998 shows that the average rate of the seven transition economies (CEE-7) stood at 62.7 per cent, slightly higher than the EU average of 61 per cent. The gender gap in employment rates in the CEECs remained smaller than in most countries in the EU.

CHART 4.3.1

Employment trends in the CEECs, 1989-1999
(1989=100)



Source: WIIW Industrial Database incorporating national statistics.

TABLE 4.3.1

GDP and employment growth in the CEECs, 1990-1999
(Cumulative growth, per cent)

	GDP			Employment		
	1990-1993	1994-1999	1990-1999	1990-1993	1994-1999	1990-1999
Bulgaria	-26.7	-7.2	-32.0	-26.2	-4.7	-29.6
Czech Republic	-13.1	9.6	-4.7	-10.3	-3.2	-13.1
Hungary	-18.1	21.3	-0.7	-26.8	-0.4	-27.1
Poland	-12.4	39.0	21.7	-15.7	9.6	-7.6
Romania	-23.9	-0.5	-24.3	-8.1	-14.0	-21.0
Slovakia	-25.0	34.0	0.5	-15.4	0.7	-14.9
Slovenia	-15.6	29.2	9.1	-20.1	0.3	-19.8

Source: WIIW Industrial Database incorporating national statistics.

Unemployment rates (table 4.3.2) had risen to between 7 and 15 per cent in the CEECs (by LFS statistics) by 1999, a reflection of the relative development of employment levels on the one hand and of the labour force (particularly of participation rates) on the other. The Czech "unemployment miracle" which lasted until 1996 has evaporated. The slight falls of the unemployment rates in the mid-1990s in most countries of the region and their deterioration in the late 1990s reflected, first, higher GDP growth in the region and, more recently, a slowdown (after 1999 positive growth is recorded again). Unemployment rates across the region are now within a range not dissimilar to the EU in the 1990s and reflect more strongly the patterns of GDP growth.

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[224] H. Vidovic, "Recent labour market developments in CEECs", The Vienna Institute for International Economic Studies (WIIW), *The Vienna Institute Monthly Report,* No. 4 (Vienna), 2000, pp. 9-19.

TABLE 4.3.2

Unemployment and employment rates in the CEECs, 1996 and 1998[a]
(Percentages)

	Unemployment rates		*Employment rates*					
	1996	*1998*	*1996*			*1998*		
	Total	*Total*	*Total*	*Men*	*Women*	*Total*	*Men*	*Women*
Bulgaria	13.6	14.1	55.3	59.2	51.4	54.2	58.3	50.2
Czech Republic	3.9	6.5	69.5	77.8	61.3	67.6	76.0	59.2
Hungary	9.9	7.8	53.0	60.6	45.8	54.2	61.1	47.5
Poland	12.3	10.6	60.4	67.3	53.7	60.8	68.0	53.8
Romania	6.7	6.3	71.3	78.4	64.3	70.8	77.3	64.3
Slovakia	11.3	12.5	62.1	69.6	54.7	60.3	66.9	53.7
Slovenia	7.3	7.9	63.0	67.4	58.7	65.1	69.5	60.5
EU-15	10.8	10.0	60.3	70.4	50.2	61.1	71.1	51.2

Source: Eurostat, *Central European Countries' Employment and Labour Market Review, Employment in Europe 1999.*

[a] Based on labour force surveys.

4.4 Patterns of industrial restructuring

This section concentrates on features of the *process of restructuring* which took place in the *industrial (or manufacturing) sector* and examines the developments over two phases: the phase immediately after the beginning of the transition (1990-1993) and the phase after that (1993-1998).

Chart 4.4.1 depicts annual growth rates of production, employment, labour productivity, investment and exports by the industrial sectors of the CEE-7. It shows clearly the features of the two distinct developmental phases since the beginning of the transformation: deep "transformational recessions" followed by economic recoveries in the CEE-5[225] (with, however, interruptions in growth, evident in the annual time series), while there was still a negative growth rate of production for Bulgaria and Romania.

Over the more recent period 1993-1998, the CEECs have continued to differ: the strongest resumption of industrial production was in Hungary and Poland, while (labour) productivity growth was highest in Hungary (where production growth was accompanied by continued employment declines), followed by Poland (with high output growth and nearly stable employment levels); productivity growth was more moderate in the Czech Republic, Slovakia and Slovenia where more moderate trend growth rates of output went along with less labour shake-out from industry than in Hungary. Bulgaria and Romania continued to be characterized by declining industrial production, and an even sharper contraction of employment (particularly in Bulgaria), which led to moderate increases in productivity and a sharp slump in industrial investment; overall export performance remained disappointing in Bulgaria, while the Romanian experience was more successful.

In the growth profiles of the two periods some of the important peculiarities of the transition processes in the CEECs can be detected:

- There is evidence for non-market conforming behaviour particularly in the first period, and for the "laggards" also in the second period: e.g. substantial labour hoarding in the face of declining output, or investment declining less than output; however, the evidence for such behaviour (at this macro-level) is much less evident over the second period;
- The diversity of performance remains very pronounced over the second period, evidenced in the first place by the difference in performance between the CEE-5 and Bulgaria and Romania; but within the CEE-5 group there are also sharply differing trend growth rates in productivity, investment and export performance. The rapid growth rates in productivity and exports in some of them (productivity growth being high in Hungary and Poland, export growth in the Czech Republic, Hungary and Poland) provide some evidence of a move towards "active restructuring", i.e. of a change in behavioural responses by enterprises moving into new markets, upgrading the composition and quality of their products (see sections 4.5 and 4.6 below) and restructuring their production processes.

Differences in the patterns of catching up and the development of cost competitiveness can be observed in chart 4.4.2 where wage rate growth (at current exchange rates) and productivity levels have been plotted in relation to the Austrian levels over the period 1991-1998 (Austrian levels have been kept constant to avoid taking in wage and exchange rate movements on the Austrian side as well). The superior Hungarian and Polish performances can be seen leading to improving or stationary relative labour unit costs, while in the other CEE-5 (the Czech Republic, Slovakia, Slovenia) the relationship between wage growth and productivity growth was such that relative unit labour costs rose. Wage growth (at current exchange rates) in Bulgaria and Romania was very low so that moderate productivity growth led to their relatively stable unit labour costs.

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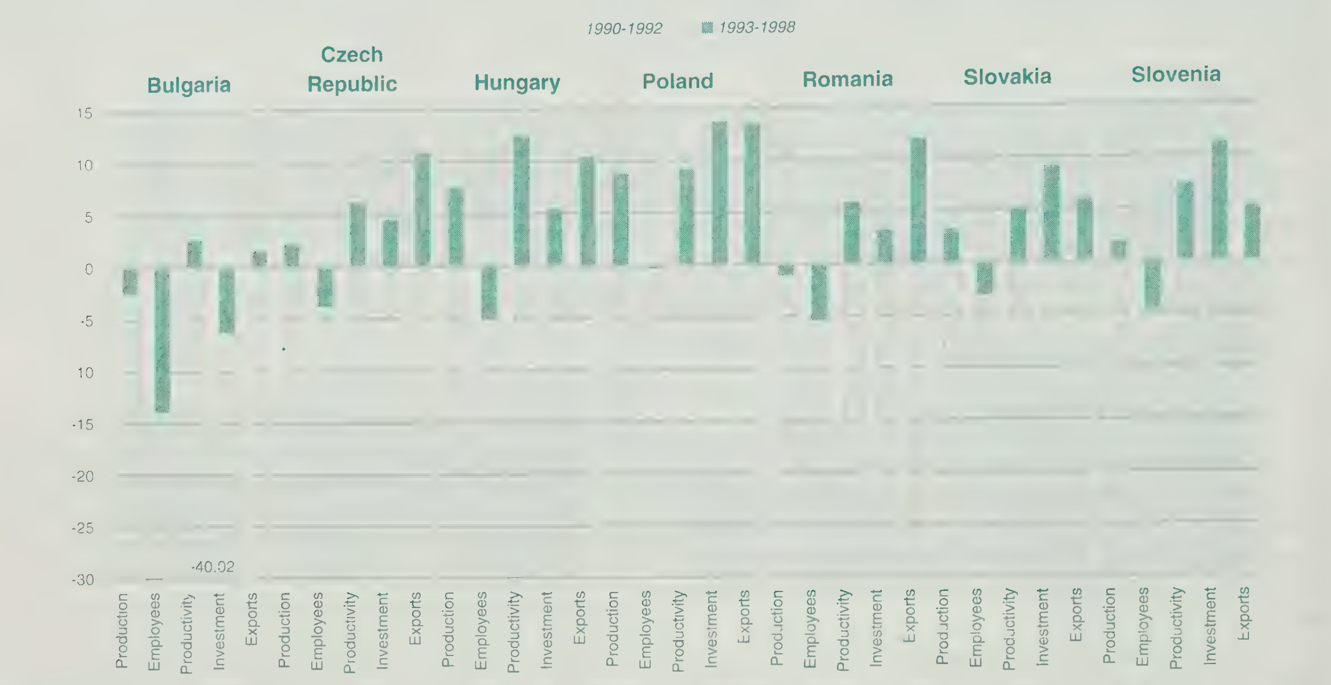
[225] The seven countries listed in table 4.3.1 less Bulgaria and Romania.

CHART 4.4.1

Industrial production, employees, productivity, investment and exports, 1990-1992 and 1993-1998
(Average annual growth rate, per cent)



Source: WIIW Industrial Database incorporating national statistics.

Note: Growth rates for production, investment and productivity are calculated from constant price data; for exports from current dollar price data.

Patterns of catching up at the branch level

A cross-industry analysis shows that branch patterns of wage rate growth is less dispersed than productivity growth[226] so that interindustry differences in (labour) productivity growth also show up in changes in relative unit labour costs, i.e. the industries with above average productivity growth also improve their relative position in terms of relative unit labour costs. (This issue is discussed again in section 4.7 below, which considers the scope for changes in the structures of comparative advantage of the CEE economies within the overall European economy.)

Here, the attention is on some interesting patterns in the catching-up processes of a select group of industries. Chart 4.4.3 shows such patterns for five industries (at the NACE 2-digit level), namely textiles, leather, machinery, electrical goods and transport equipment.[227] It shows the evolution of wage and productivity levels and of unit labour costs relative to Austria over the period 1991 to 1998. Productivity levels are expressed at constant prices of 1996 (with output levels compared at PPP rates); wage levels are compared at current exchange rates.[228]

There are quite large differences at the level of individual branches. Without going into detail and describing the different trajectories for each country and industry, some general patterns are apparent. In most CEECs the productivity levels of the five industries (relative to Austria) were initially rather higher in the "low-tech" sectors (textiles, clothing, footwear and leather products). Over time, however, the general pattern is for catching up to be stronger, and in some cases much stronger, in the "medium-/high-tech" (machinery, electrical equipment, transport) than in the low-tech sectors. In the low-tech branches, relative productivity growth is either stagnant or pretty low. Wage catching up, on the other hand, is very similar across branches, which means that there is wage drift between industries and that the countries concerned are gaining comparative (unit cost) advantages in the medium-/high-tech industries. This can also be seen by looking at the relative unit labour costs, which in most countries are rising much faster in the low-tech than in the medium-/high-tech industries.

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[226] P. Havlik and M. Landesmann, "Industrial competitiveness", paper prepared for the Spring Seminar of The Vienna Institute for International Economic Studies (Vienna), April 2000.

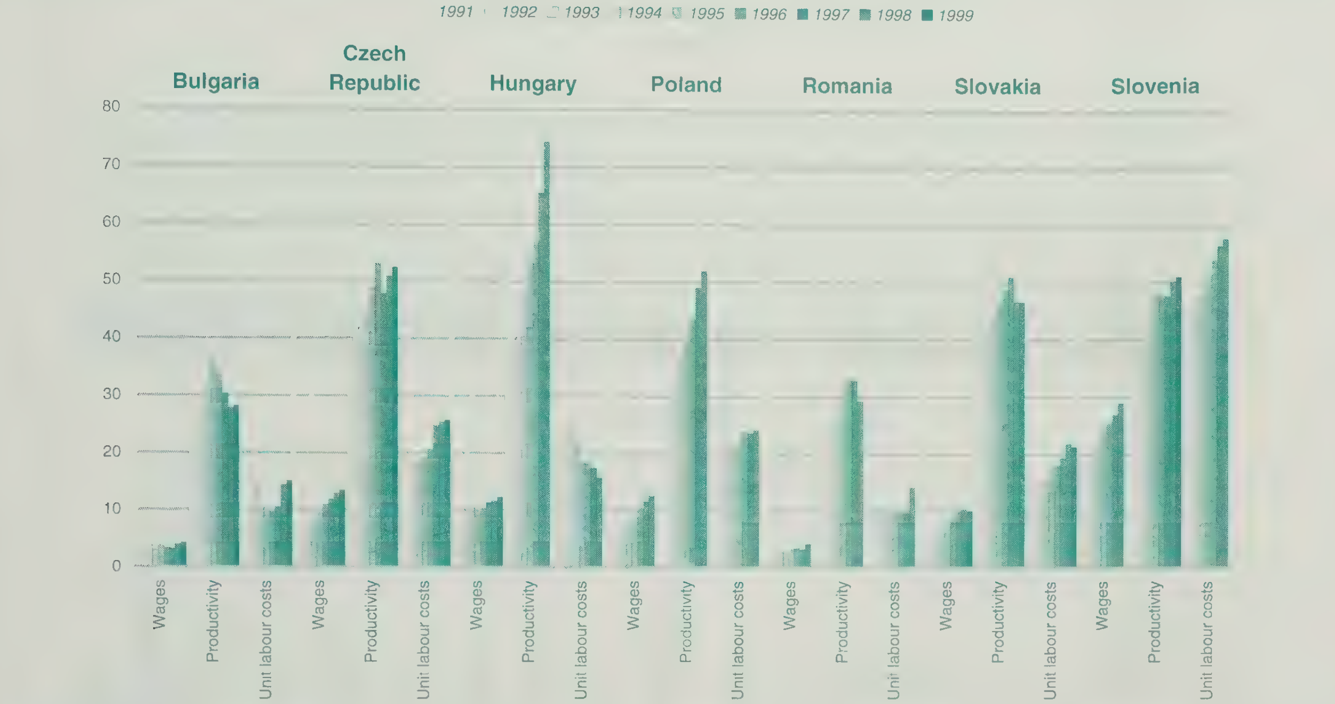
[227] For reasons of space only three countries are singled out; further information can be obtained from the author.

[228] For a more detailed discussion of the methodology used and further results based on industry-level PPP rates, see P. Havlik and M. Landesmann, op. cit.

CHART 4.4.2

Wages (in ECUs), productivity (at PPPs) and unit labour costs (in ECUs) in manufacturing industry, 1991-1999

(Austria 1996=100)



Source: WIIW Industrial Database.

Next we divide the 14 NACE 2-digit industries into three subgroups:[229] a *low-tech group* (including food products, beverages and tobacco; textiles and textile products; and leather and leather products); a *medium/high-tech group* (including machinery and equipment; electrical and optical equipment; and transport equipment), and a *resource- (and scale-) intensive group* (including wood and wood products; coke, refined petroleum products and nuclear fuel; chemicals, chemical products and man-made fibres; and other non-metallic mineral products). Initial gaps and growth rates (more precisely, annual rates of decline in the gap) in the productivity levels and wage rates of the three industrial groupings across the whole country sample (i.e. the CEE-7), over the period 1991-1997, are shown in table 4.4.1.

As regards productivity catching up, the high-tech industries were those with the highest average growth rate (16 per cent per annum) and, compared with the resource-intensive industries, show a rather high initial gap. The low-tech industries have an initial gap comparable to the high-tech industries, but a very low rate of closure of the gap (4 per cent per annum). The resource-intensive industries had the lowest initial gap on average and a relatively high rate of closure (7 per cent per annum).

Table 4.4.1 also allows some comparisons between productivity and wage catching up across the three industrial groupings. (Note, however, that wages in this calculation are expressed in current PPPs and productivity levels at constant prices; thus the absolute values for the growth rates are not comparable, but the relative structure across branches is interesting.)

The initial gap in labour productivity levels is largest in the medium-/high-tech industries and smallest in the resource-intensive industries, with the low-tech sectors lying in between. The initial gap of wages is larger than that of productivity levels in all three groups and much more similar across industries. The pattern is quite different for the growth rates of these two variables. Productivity growth is by far the highest on average in the medium-/high-tech sectors, medium in the resource-intensive industries and lowest in the low-tech sectors. But the growth rates in wages are much more similar: they are almost the same in the medium-/high-tech and resource-intensive industries, and a little bit lower in the low-tech industries. In the low-tech and resource-intensive industries the growth of wages is higher than that of productivity; in the medium-/high-tech industries productivity growth is much higher than wage growth.

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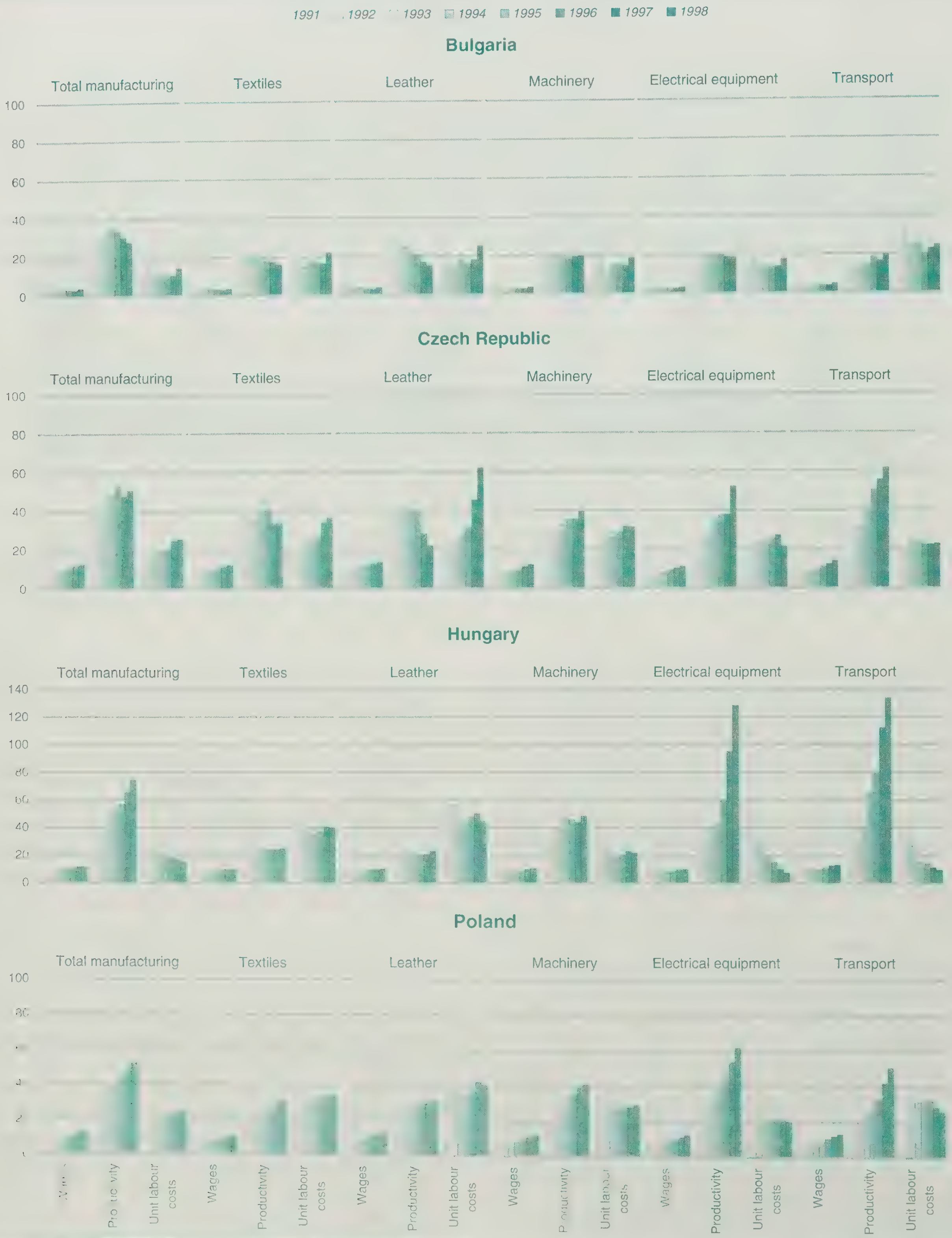
[229] The following calculations are taken from R. Stehrer, M. Landesmann and J. Burgstaller, *Convergence Patterns at the Industrial Level: The Dynamics of Comparative Advantage*, The Vienna Institute for International Economic Studies, Working Paper, No. 11 (Vienna), 1999.

CHART 4.4.3

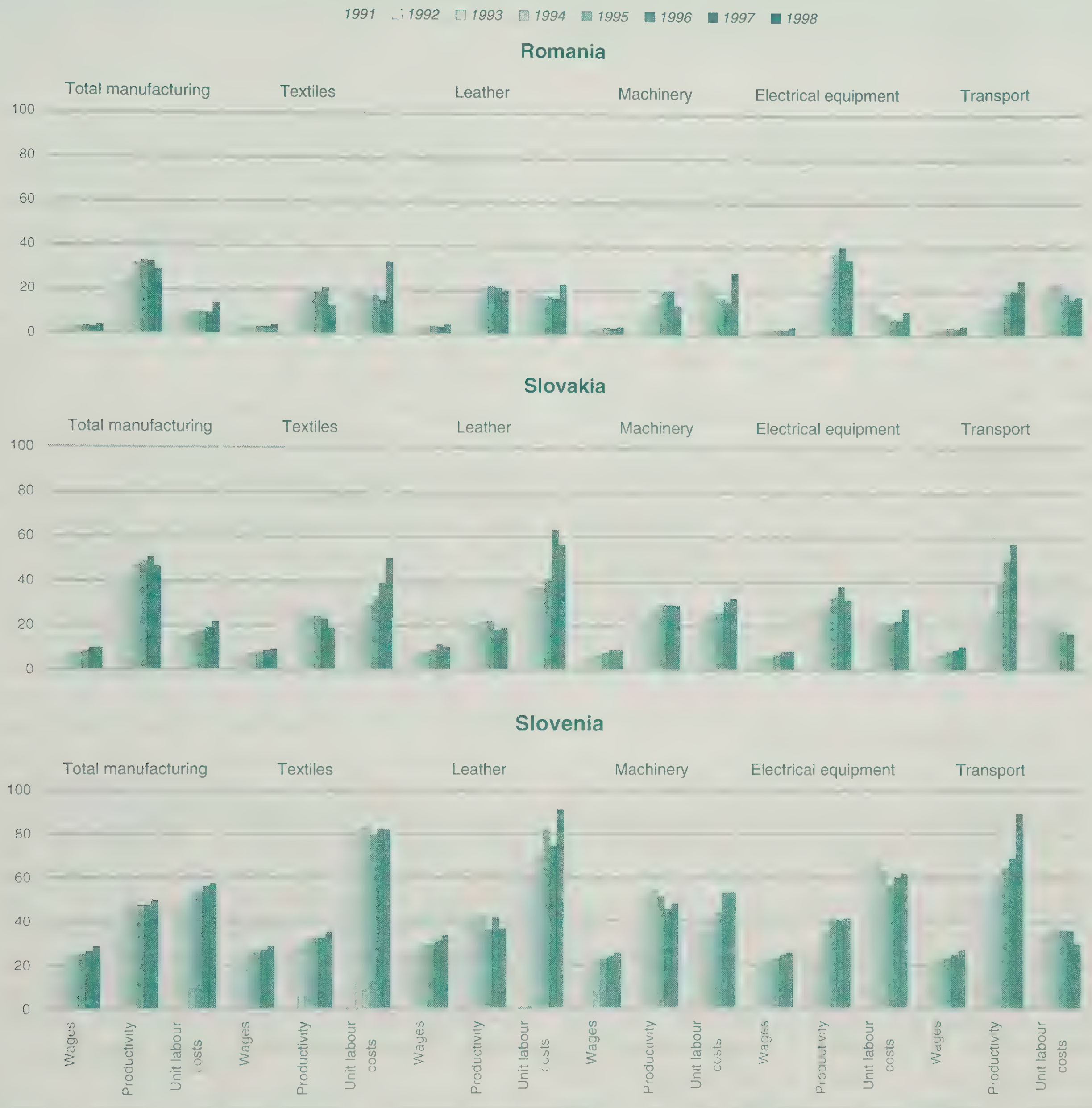
Changes in wages, productivity and unit labour costs in the CEECs, 1991-1998
(Austria 1996=100)



(For source see end of chart.)

CHART 4.4.3 (concluded)

Changes in wages, productivity and unit labour costs in the CEECs, 1991-1998
(Austria 1996=100)



Source: WIIW Industrial Database.

Thus, whereas the comparative cost advantage in 1991 was in the resource-based industries for the CEECs, this pattern may have changed. The CEECs are gaining comparative cost advantages in the medium-/higher-tech sectors and losing them in the low-tech industries.

A number of conclusions can be drawn from this analysis of catching-up patterns at the disaggregated level. The overall pattern is that the CEE-5 are catching up in productivity levels relatively faster in the technologically more sophisticated industries than in the low-tech industries (see also section 4.8 below.) How can such a pattern be explained? Without going into a full discussion at this stage, the general hypothesis in the "convergence" growth literature is that countries lagging further behind at a starting point of such a convergence process tend to catch up more rapidly. Applying this idea at the level of industries would suggest that the rate of closure of a productivity gap would be higher in those industries in which the initial gaps (and hence the "learning potential") were greatest. Other factors which could further substantiate such an analysis are the impact of FDI across branches, industry-specific skill endowments, and different learning curves across

TABLE 4.4.1

Average initial gaps and growth rates for industry groups, 1991-1997
(Per cent)

	Low-tech		*Resource-intensive*		*High-tech*	
	Productivity	*Wages*	*Productivity*	*Wages*	*Productivity*	*Wages*
Gap	38.2	33.7	44.6	29.2	34.3	27.4
Growth rate	3.5	4.9	7.0	7.8	16.1	7.9

Source: Calculated from the WIIW Industrial Database.

Note: The gap is defined as the level of a variable (productivity, wage rate) in the CEECs in 1991 x 100 divided by the level of that variable in Austria in 1991. Growth rates refer to the annual percentage rate of decline in the gap between 1991 and 1997.

industries. A second important result is that the catching up of wages is much more similar across branches within the countries. Although the statistical database for the CEECs is rather small, this pattern emerges quite clearly (see also the more general results reported in section 4.7(i)). The overall result of this general pattern is that, due to the uneven industrial pattern of catching up in productivity levels across industries and, on the other hand, the wage drift across industrial branches, the CEECs as catching-up countries have the potential to increasingly gain comparative advantages in the technologically more sophisticated industries.

4.5 Convergence in structures?

A theme which has occupied researchers at The Vienna Institute for International Economic Studies (WIIW) for quite a while is the question whether there is “convergence in structures” or whether there is a tendency towards specialization in production and employment as between the CEECs and the EU economies. A summary measure of the similarity (or distance) between the industrial structures of different countries or country groupings is given in table 4.5.1: the indicator shows the similarity of output structures in manufacturing industry (based on the 2-digit NACE industrial classification). Two groups of EU reference countries are selected for comparisons with the CEECs: a group of northern countries (Belgium, France, Germany and the United Kingdom) and a group of southern countries (Greece, Portugal and Spain).

Broadly, the comparisons suggest the following:

- There is a clear difference across the CEECs in their respective degree of similarity to the northern and southern groups. The countries closest to the structure of manufacturing industry in the northern group are the Czech Republic and Slovenia followed by Slovakia. Those closest to the southern reference group are Bulgaria, Poland and Romania. The distance from the southern group is quite large for the other CEECs;
- As regards developments over time, there was a general convergence in structures between the CEE-5 and the northern EU reference group between 1992 and 1998 (with the exception of Hungary in the last two years which results mostly from a sharp increase in the share of electrical and optical equipment). Bulgaria and Romania have remained stationary in their distance from the northern reference group.

Detailed information with respect to structural comparisons between the CEECs and the two EU reference groups for the two years 1993 and 1998 is given in table 4.5.2. (CEEC output shares were calculated at current prices of 1996.) There are substantial differences in structure between the EU northern and southern manufacturing industries: there are relatively larger shares of food products, the more labour-intensive branches of textiles and leather products, and the raw-material-based wood products and non-metallic mineral products in the EU southern countries, while in the north chemicals and all the engineering products as well as transport equipment with its supplier industries (rubber and plastics) are more strongly represented. In some of the CEECs there are relatively large shares for food products (Bulgaria, Poland, Romania, while there was a large fall in their relative importance in Hungary), of wood and wood products in some of the economies with a lot of forests (Poland, Slovakia, Slovenia) as well as paper and paper products. There is also a significant inherited position of basic metals and of machinery in some of the CEECs. There are some striking, new specializations in transport equipment (the Czech Republic, Hungary, Slovakia) and the remarkable strength of Hungary in electrical equipment (including electronics). The diversity of evolving specializations in some of the CEECs is apparent, as is their position between the northern and southern EU economies as regards patterns of industrial specialization (in labour-intensive and resource-based industries, on the one hand, and capital-, technology- and skill-intensive industries, on the other).

4.6 Trade specialization

(i) Patterns of trade specialization with the EU: interindustry specialization

This section refers to research conducted at WIIW concerning the pattern of trade specialization of CEECs[230] in which the factor intensities of trade between the

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[230] M. Landesmann, “The pattern of east-west European integration: catching up or falling behind?”, in R. Dobrinsky and M. Landesmann (eds.), *Transforming Economies and European Integration* (Cheltenham, Edward Elgar, 1996); P. Havlik, “Structural change, trade specialization and competitiveness of manufacturing industry in the CEECs”, in M. Landesmann (ed.), *Structural Developments in Central and Eastern Europe. WIIW Report 1999*, The Vienna Institute for International Economic Studies (Vienna), chap. 3.

TABLE 4.5.1

Comparison of individual CEECs' industrial (output) structures with two groups of west European economies,[a] 1989-1998

(Structural deviation indicator (S))[b]

	1989	*1990*	*1991*	*1992*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*
EU-north (Belgium, France, Germany, United Kingdom[c]											
Bulgaria	4.06	5.10	5.56	..	6.15	4.97	4.46	4.49	4.98	4.55	4.62
Czech Republic[d]	4.65	4.71	4.34	..	3.45	3.49	3.51	3.57	3.21	3.10	2.79
Hungary	3.08	3.79	4.98	5.79[e]	5.92	5.00	4.59	3.93	3.89	5.04	7.31
Poland	4.63[e]	4.83	5.89	..	5.67	5.51	5.34	5.01	4.87	4.49	4.40
Romania[f]	4.32	4.50	4.98	..	5.57	4.27	4.01	3.40	3.67	4.40	..
Slovakia[d]	3.55	3.46	4.08	..	4.10	4.00	4.20	3.90	3.08	3.21	3.34
Slovenia	2.18	2.03	1.85	..	2.17	2.07	1.87	1.71	1.53	1.65	1.52
EU-south (Greece, Portugal, Spain)[c]											
Bulgaria	2.96	2.76	3.15	..	3.47	2.67	3.14	3.75	4.44	4.28	3.36
Czech Republic[d]	6.65	6.59	4.42	..	4.20	4.09	4.17	4.66	4.67	4.98	5.22
Hungary	3.49	3.21	3.36	3.84[e]	3.86	3.16	3.10	3.02	3.58	6.18	8.35
Poland	3.12[e]	2.48	3.19	..	2.78	2.64	2.55	2.55	2.57	2.46	2.54
Romania[f]	2.84	2.63	2.36	..	2.81	2.37	3.64	3.54	3.04	3.60	..
Slovakia[d]	4.81	4.38	4.10	..	4.36	4.96	5.70	6.35	5.92	6.29	6.73
Slovenia	5.88	5.27	4.81	..	4.93	4.73	5.10	5.25	4.90	4.90	5.14

	1992		*1992*
Structural deviation indicator (S) between selected west European economies			
Germany/France	2.77	EU-north/EU-south	4.60
Germany/United Kingdom	2.75	Portugal/Germany	6.95
United Kingdom/France	2.48	Spain/Germany	5.25

Source: Compiled from the WIIW Industrial Database.

a Based on 2-digit level NACE Rev.1 data for output (at constant prices).

b See following formula:

$$S=\sqrt{\sum_k (sh_k^x - sh_k^y)^2 \cdot (sh_k^y/100)}$$

x = individual CEEC compared
y = individual west European country or region compared
k = individual industry

sh_k^y = share of industry k in total output at constant prices of country y (per cent)

sh_k^x = share of industry k in total output at constant prices of country x (per cent)

c For EU-north and EU-south, the reference year is 1992 throughout; the regions were calculated as the unweighted arithmetic mean of the country structures.

d Until 1993, the Czech and Slovak parts of the former Czechoslovakia.

e Comparable 2-digit NACE data were available from 1990 onwards only; the figures have been aggregated from ISIC statistics by WIIW.

f As production shares at constant prices in Romania do not seem to be reliable after 1993, from 1994 onwards shares at current prices were used for comparison with the EU (1997 was the last year available).

CEECs and the EU were analysed.[231] The methodology focused on the 10, 20 and 30 most x-factor-intensive industries (where x stands respectively for labour, capital, R&D, skill and energy) among the full sample of 3-digit NACE industries in the CEECs and these were compared with the EU import structures or the export structures of other EU trading partners.[232] Revealed comparative advantage (RCA) indicators were also calculated for these x-factor-intensive groups of industries (see table 4.6.1 for the values of the 30 most x-factor-intensive branches).[233]

Here the results of the factor intensity analysis are summarized for the CEEC trade flows in relation to EU imports (including EU countries trading in EU markets):

- In 1989 the trade specialization profile of the CEECs with the EU was typical of a less developed economy

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[231] The EU-12, i.e. the present members less Austria, Finland and Sweden, rather than the EU-15 grouping was used in order to provide a consistent time series going back to 1989.

[232] The factor intensities of the different 3-digit NACE industries have been compiled from EU sources; they have been previously used in M. Landesmann, op. cit., and P. Havlik, op. cit., where also the caveats with respect to these measures are discussed (see appendix to this chapter).

[233] The RCA of an industry is defined as: $(X_i - M_i)/(X_i + M_i)$ where X_i and M_i refer to exports and imports of industry i (to/from the EU), respectively. In the following the statistics regarding export structure comparisons are omitted to save space – they are available from the author upon request.

TABLE 4.5.2

Total manufacturing in the CEECs, 1993, 1996 and 1998
(Percentages)

	Bulgaria		Czech Republic		Hungary		Poland		Romania		Slovakia		Slovenia		Austria		EU-N(3)	EU-South
	1993	1998	1993	1998	1993	1998	1993	1998	1993	1998	1993	1998	1993	1998	1993	1998	1996	1996
Production structures (current prices)																		
Manufacturing total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products; beverages and tobacco	23.9	21.7	19.4	17.1	28.1	18.9	27.3	24.6	23.6	25.1	17.9	14.7	15.4	14.9	17.5	12.5	15.3	22.9
Textiles and textile products	6.9	6.0	6.3	4.6	5.3	3.7	7.2	5.6	8.2	7.2	5.3	4.3	8.4	7.5	5.1	3.7	3.6	9.6
Leather and leather products	1.8	1.6	2.1	0.7	1.3	0.8	1.4	1.0	1.9	1.7	2.1	1.0	3.0	1.5	0.9	0.8	0.5	2.7
Wood and wood products	1.5	1.1	2.0	2.4	1.6	1.4	2.8	3.5	2.1	2.5	1.8	3.3	3.7	3.3	3.0	4.6	1.4	2.8
Pulp, paper and paper products; publishing and printing	3.0	3.8	3.8	4.6	5.1	4.0	4.4	6.0	2.9	3.1	5.5	6.0	6.3	7.3	7.5	8.4	7.5	6.4
Coke, refined petroleum products and nuclear fuel	10.8	17.8	6.0	2.5	9.4	5.8	8.6	3.9	10.2	8.0	9.2	5.9	1.2	0.3	3.2	4.6	5.2	7.0
Chemicals, chemical products and man-made fibres	9.0	12.1	6.7	6.4	10.9	8.0	7.0	6.9	8.8	7.4	9.3	6.8	10.6	10.0	8.4	6.5	10.6	8.8
Rubber and plastic products	2.7	2.8	2.5	4.1	2.9	3.5	3.3	4.3	2.7	2.2	3.8	3.5	4.6	3.9	2.9	3.9	4.1	3.4
Other non-metallic mineral products	4.0	4.2	5.4	5.9	4.0	3.2	4.4	4.9	3.4	4.8	4.9	5.0	4.6	4.6	6.0	5.1	3.1	6.1
Basic metals and fabricated metal products	13.0	11.3	17.6	18.4	10.8	9.3	11.6	11.8	13.3	16.3	19.0	17.7	12.3	11.3	13.4	14.4	10.7	10.4
Machinery and equipment n.e.c.	6.7	9.7	9.4	9.3	6.0	4.8	6.3	6.3	7.3	5.5	8.5	7.2	7.8	10.3	9.0	10.5	10.6	3.6
Electrical and optical equipment	5.7	4.0	4.9	7.3	7.2	19.5	5.5	7.0	7.4	5.0	5.3	7.9	8.2	9.1	12.8	12.7	10.6	5.9
Transport equipment	5.0	2.6	10.6	13.0	5.4	15.7	6.8	9.7	5.1	7.7	4.6	13.9	9.5	11.2	6.1	8.2	14.1	7.9
Manufacturing n.e.c.	6.1	1.4	3.2	3.7	1.9	1.3	3.4	4.5	3.0	3.6	2.8	3.0	4.5	4.8	4.2	4.2	2.6	2.3
Employment structures																		
Manufacturing total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products; beverages and tobacco	10.7	16.6	9.3	12.0	20.7	18.1	17.7	18.6	10.1	11.5	10.9	11.6	7.5	9.1	11.3	11.6	11.2	17.2
Textiles and textile products	13.5	19.3	11.0	9.9	14.4	15.4	14.9	13.8	18.3	19.6	11.7	11.3	17.3	15.0	7.9	5.6	6.4	19.2
Leather and leather products	2.8	3.5	2.8	2.1	4.1	3.5	3.0	2.3	3.7	4.4	4.9	3.4	4.4	3.6	1.4	1.2	1.0	4.4
Wood and wood products	1.8	2.2	1.9	3.1	2.4	2.2	3.5	4.3	3.1	4.2	3.1	4.9	4.9	4.8	2.8	5.7	1.9	3.7
Pulp, paper and paper products; publishing and printing	2.3	3.8	3.6	3.8	4.7	3.5	3.5	4.4	2.5	2.8	4.9	5.2	5.9	6.3	7.3	7.2	8.4	6.2
Coke, refined petroleum products and nuclear fuel	1.8	1.9	1.5	0.3	2.8	2.3	0.9	0.8	1.4	1.4	1.6	1.0	0.2	0.1	0.7	0.5	0.4	0.8
Chemicals, chemical products and man-made fibres	6.0	6.6	4.7	3.8	6.6	5.8	5.0	4.7	5.8	4.9	6.2	4.9	4.5	5.4	6.3	4.5	7.4	5.5
Rubber and plastic products	2.7	3.1	2.6	4.1	2.7	3.9	2.9	3.9	2.1	2.1	2.8	3.1	3.7	4.8	3.6	4.6	5.5	3.5
Other non-metallic mineral products	4.9	5.0	6.1	6.2	4.7	4.7	6.2	5.9	5.3	5.5	6.2	5.8	4.7	4.9	6.1	5.7	3.7	7.3
Basic metals and fabricated metal products	10.6	5.3	17.4	17.2	10.6	8.9	11.4	11.8	12.2	12.4	11.5	14.9	15.0	14.0	15.8	16.2	13.0	11.1
Machinery and equipment n.e.c.	13.9	20.1	16.6	13.9	8.8	8.1	11.5	9.5	15.1	10.9	17.1	13.7	9.6	10.2	10.4	12.2	12.4	4.5
Electrical and optical equipment	8.6	6.4	8.4	9.9	9.4	14.3	6.7	6.4	5.4	4.8	8.5	10.2	11.0	11.2	14.3	12.3	12.6	5.3
Transport equipment	6.7	3.2	9.2	8.0	4.5	6.1	7.9	7.1	8.5	8.5	6.1	5.2	6.2	4.5	5.0	5.6	12.0	6.3
Manufacturing n.e.c.	13.7	3.1	5.0	5.7	3.5	3.1	4.9	6.5	6.6	7.0	4.5	4.8	5.1	6.1	7.0	7.1	4.1	4.9

Source: WIIW Industrial Database incorporating national statistics.

trading with more developed economies: the share of labour-intensive industrial branches was above average, and that of capital-, and especially R&D- and skill-intensive branches were below average; the share of energy-intensive branches was above-average, except in Hungary, which reflects the heritage of cheap energy supplies within the CMEA;

- Subsequently, important changes have occurred in the CEECs` export structure vis-à-vis EU imports and in their RCAs (see table 4.6.1 for the latter). The most remarkable change was in Hungary: sizeable deficits (in its exports relative to total EU imports) in the capital-, R&D- and skill-intensive industries were either completely eroded or transformed into surpluses. A similar but less spectacular change occurred in the Czech Republic and Poland where the deficits in skill-, R&D- and capital-intensive branches have been reduced. For these economies and also for Slovakia the relatively strong presence of energy-intensive branches has been substantially reduced, but this has not been the case for Bulgaria and Romania (the former's dependence upon energy-intensive exports to the EU has actually increased markedly). The picture with respect to labour-intensive industries is also remarkably different in Bulgaria and Romania as compared with the other CEECs. Romania's dependence upon labour-intensive export products has increased markedly while it has declined strongly in Bulgaria which no longer shows any positive specialization in this category;

TABLE 4.6.1

RCA values in trade with the EU-12 of the 30 most x-factor-intensive industries

	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia	Slovenia	Greece	Portugal	Spain	Ireland	Turkey
Capital intensity												
1989	-0.43		-0.19	0.06								
1993	-0.28	-0.11	-0.37	-0.23	-0.36	0.22	-0.24	-0.57	-0.41	-0.07	0.29	-0.40
1998	0.13	-0.13	0.16	-0.27	-0.23	0.11	-0.13	-0.63	-0.28	-0.06	0.19	-0.32
Labour intensity												
1989	-0.40		0.13	0.17								
1993	0.12	0.03	0.16	0.26	0.38	0.18	0.33	-0.16	0.28	-0.20	-0.05	0.33
1998	0.27	0.00	-0.14	0.00	0.42	0.10	0.09	-0.39	0.13	-0.16	-0.07	0.27
R&D intensity												
1989	-0.84		-0.59	-0.54								
1993	-0.64	-0.45	-0.42	-0.54	-0.72	-0.60	-0.16	-0.86	-0.50	-0.14	0.19	-0.81
1998	-0.58	-0.14	0.04	-0.47	-0.62	-0.08	-0.09	-0.87	-0.35	-0.13	0.13	-0.60
Skill intensity												
1989	-0.77		-0.54	-0.54								
1993	-0.54	-0.46	-0.38	-0.53	-0.60	-0.38	-0.05	-0.82	-0.40	-0.33	0.22	-0.76
1998	-0.49	-0.24	-0.12	-0.48	-0.55	-0.28	-0.11	-0.83	-0.33	-0.30	0.21	-0.53
Energy intensity												
1989	-0.49		-0.15	0.09	0.49							
1993	-0.01	0.07	-0.18	-0.06	-0.15	0.37	-0.01	-0.52	-0.19	-0.15	-0.12	-0.47
1998	0.25	-0.05	-0.20	-0.21	-0.07	0.10	-0.19	-0.54	-0.19	-0.16	-0.22	-0.21

Source: Compiled from Eurostat trade statistics.

Note: See appendix to this chapter for factor intensities used in the analysis.

- Comparing the CEECs' trade structure with the lower income, southern EU economies, and also with Ireland and Turkey (see table 4.6.1 for the RCA indicators), the main features are as follows:
  - With the exception of Bulgaria and Romania, the CEECs, by 1998, had a much lower share of labour-intensive industries in their exports to the EU than Greece, Portugal and Turkey; their export structure is more in line with that of Spain in this respect;
  - The same can be said with respect to the shares of R&D- and skill-intensive branches in their exports to the EU: most CEECs – again with the exception of Bulgaria and Romania are now more in line with the more advanced of the southern EU economies rather than with the less advanced ones;
  - Particularly remarkable are the developments in the structure of Hungary with the EU. Given the degree of interindustry branch specialization, Hungary's export structure and pattern of RCAs are close to Ireland's, an economy whose trading structure has similarly been shaped by the extensive involvement of FDI in its industrial development.

(ii) Patterns of trade specialization with the EU: vertical product differentiation and product quality catching up

Changes in the pattern of interindustry trade specialization should not distract from another dimension in which there are substantial differences between producers engaged in international trade, namely, "*vertical product differentiation*". This is a subject on which substantial research has been undertaken recently.[234] Vertical product differentiation refers to a situation in which producers are differentiated by the "quality" of the product variety which they sell as compared with "horizontal product differentiation" where different consumers prefer one variant over another, but where there is no agreed quality ranking across products.

The measure of "quality differentiation" is the unit price charged for a very narrowly defined product (at the 8-digit CN product level of international trade statistics) in the same market. For each industry the full (8-digit CN) product level information was used to construct an industry level (weighted) price/quality gap indicator, Q, for country c's exports to the EU:

$$Q_j^c = \sum_{i \in I(j)} (p_i^c / p_i^{EU}).\chi_i^c$$

where p_i^c is the price (per kg) at which country c sells exports of a 3-digit product item i on EU markets (which refer here to the EU-12);

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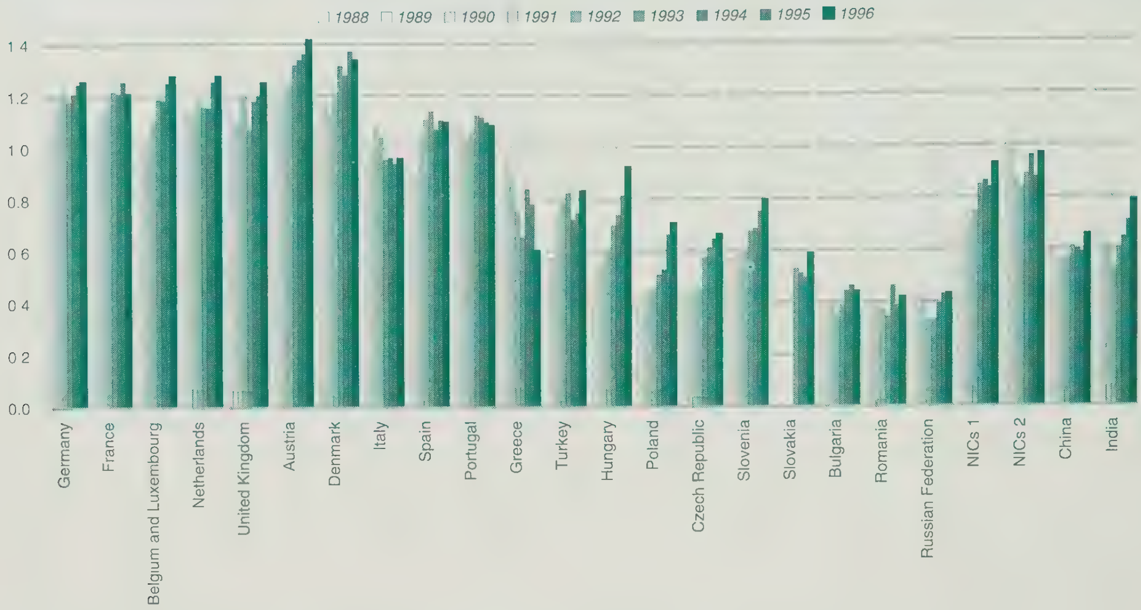
[234] J. Burgstaller and M. Landesmann, "Trade performance of east European producers on EU markets: an assessment of product quality", The Vienna Institute for International Economic Studies, *Research Reports*, No. 255 (Vienna), April 1999; M. Jansen and M. Landesmann, "European competitiveness: quality rather than price", in J. Fagerberg, P. Guerrieri and B. Verspagen (eds.), *The Economic Challenge for Europe. Adapting to Innovation Based Growth* (Cheltenham, Edward Elgar, 1999); L. Fontagné and M. Freudenberg, *Intra-industry Trade: Methodological Issues Reconsidered*, CEPII, Working Paper, No. 97-01 (Paris), January 1997; K. Aiginger, "Europe's position in quality competition", study commissioned by the European Commission, DG Enterprise, for the *Competitiveness Report 2000*, etc.

CHART 4.6.1

The price-quality gap for engineering exports to the EU, 1988-1996

(EU-12=1)



Source: Compiled from detailed (8-digit) EU trade statistics.

Note: For the definition of the price-quality indicator see text.

p^{EU}_i is the average price of product i in total EU-12 imports;

χ^c_i is the share of product item i in country c's exports to the EU-12 market, i.e.

$$\chi^c_i = x^c_i / \sum_i x^c_i$$

where x^c_i is the export value of product i for country c and, $\Sigma\, \chi^c_i = 1$, and $i \in I(j)$

where I(j) is the set of product items i belonging to (3-digit NACE) industry j.

In chart 4.6.1 the export price ("product quality") hierarchies are shown for a select group of engineering industries (all engineering products except for transport equipment) over the period 1988 to 1996.[235] There is a clear hierarchy in which the "northern EU" countries have the largest export unit values for their engineering products sold on EU markets, followed by the southern EU countries, with two groups of Asian NICs (the "four tigers", NICs1, and a second group, NICs2, composed of Indonesia, Malaysia, the Philippines and Thailand) selling at similar price levels as Greece, followed by China and India. In 1988-1991 the CEECs received extremely low (current ECUs) export prices for their engineering products on EU markets, but thereafter there is a *rapid narrowing of the "price/quality gap" for exports from the CEE-5.* There is no evidence of a narrowing of the gap for Bulgaria, Romania, Russia and Slovakia, which remain among the "lowest price/quality" suppliers to EU markets. Among the CEE-5, the Hungarian performance is again particularly impressive. Econometric estimates of the speed of "price/quality" convergence of CEECs' export products for a number of different sectors are presented in section 4.7(ii).

4.7 Some conjectures on the dynamics of comparative advantage

In a recent study[236] an attempt was made to analyse the dynamics of catching up at the industrial level. A simple (standard) model of "convergence/catching up" was estimated at the level of individual industries and shows that the estimates of convergence parameters point to interesting dynamics of comparative advantage which might explain the pattern observed for some of the catching-up CEECs. (A model of this type has been widely estimated at the level of aggregate economies, but seldom at the level of individual industries upon which the following analysis will focus.)

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[235] For a more complete set of results see J. Burgstaller and M. Landesmann, op. cit.

[236] R. Stehrer, M. Landesmann and J. Burgstaller, op. cit.

As the time series for the transition economies are still rather short, it is virtually impossible to estimate a catching-up model for the CEECs after say 1993. It is therefore useful to look at the historical experience of a larger group of catching-up economies (comprising southern EU economies, and a set of Asian and Latin American economies) to obtain some estimates of the "structural dynamics of catching up" which might help to evaluate the industry level developments observed in the CEECs (see section 4.4).

First some results are presented concerning catching-up patterns in *productivity levels* and *wage rates*, the variables which were discussed in section 4.4 above, and these are followed by the results of a convergence analysis for export unit values, which are interpreted as an indicator of *product quality*.

The productivity, wage or product quality gap is defined as:

$$G^c_t = ln(v^c_t/v^L_t) = ln(v^c_t)\text{-}ln(v^L_t) \qquad \text{... (1)}$$

where v denotes the relevant variables (output, value added and wages per employee and the export unit price), C is the country index, L stands for a leader or lead group, and t represents time. The long-run growth of the relevant variables and the quality gap G is estimated by ordinary least squares (OLS):

$$G^c_t = \alpha_0 + \Phi^c t + \varepsilon \qquad \text{... (2)}$$

This estimator uses the whole time series information on G^c_t and not just the first and last points. Thus the OLS estimator is robust with respect to the short-term effects of shocks and cycles. Φ^c denotes the growth rate of the gap in country c over the period. The last step is to regress the growth rate on the initial technology gap:

$$\Phi^c = \beta_0 + \beta^c_1 G^c_0 + \varepsilon \qquad \text{... (3)}$$

Barro and Sala-i-Martin[237] present a similar model of catching up with the technology leader, where the growth rate of output per worker in the catching-up country depends on the growth rate of the leading country, the gap and the steady state level of the gap.[238]

(i) Productivity and wage catching up

Table 4.7.1 reports the results of regression (3) for the three variables estimated over a wide range of countries excluding the CEECs.[239]

All coefficients have the expected negative sign, i.e. showing evidence for convergence, and are significant at least at the 5 per cent level. The speed of convergence of the technology gap can be computed from the estimated coefficients β_1. A coefficient of -0.024 (such as that estimated for productivity level catching up) implies that 2.4 per cent of the gap vanishes in one year. The average half-life, i.e. the time required to reduce the initial gap by one half, would then be $\ln(0.5)/\beta_1 \approx 28$ years. The coefficient for wage convergence is much lower, $\beta_1 = -0.016$, and thus predicts a half-life for the gap of about 43 years. But this effect is mainly due to the inclusion of the NIC2 group. Running the regression without this group gives a coefficient of -0.026 and an R^2 of 0.76.

Catching up at the disaggregated/industrial level

After looking at convergence at the aggregate manufacturing level, it is useful to look at the evidence of convergence at a more disaggregated level (3-digit ISIC, Rev. 2) in order to test for differences between the higher- and lower- tech sectors. To do this only two typical low-tech sectors are considered (textiles ISIC321 and wearing apparel ISIC322) and two typical high- or medium-tech sectors (non-electrical machinery ISIC381 and electrical machinery ISIC383). The methodology is the same as that introduced above.

The results of the cross-country analysis of convergence patterns (equation 3) at the industrial 3-digit level for the four industries are shown in table 4.7.2. Again, all the coefficients are negative and significant, thus indicating convergence. Further, the coefficients for the two productivity measures are higher than those for wages. The striking difference is between the two types of sector. The coefficients for the two low-tech sectors (textiles and wearing apparel) are much lower than for the medium-/high-tech sectors. The half-time of convergence in the low-tech sectors is 27 years in textiles and about 46 years in wearing apparel, whereas for non-electrical and electrical machinery it is about 20 years. (It should be noted, however, that not all the differences in the coefficients are statistically significant.) This indicates a faster rate of convergence in the higher-tech sectors. On the other hand, the coefficients for wage catching up are quite similar across the sectors, which indicates again the existence of wage drift. Hence, catching-up countries are losing their comparative advantages in the low-tech sectors. The two main results can be summarized as follows: first, the two medium-/high-tech sectors (non-electric and electrical machinery), show a faster rate of productivity catching up than in the other sectors. Second, the estimated coefficients for the wage variable suggest little difference between the sectors.

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[237] R. Barro and X. Sala-i-Martin, "Technological diffusion, convergence and growth", *Journal of Economic Growth*, Vol. 2, No. 1, March 1997, pp. 1-26. Elsewhere they propose a non-linear least squares regression of the form $\Phi = \beta_0 + [(1\text{-}exp(\beta_1 T)/T]\ G_0 + \varepsilon$ to average over the time span. The results are very similar to the linear regressions and thus only the latter are reported here. R. Barro and X. Sala-i-Martin, *Economic Growth* (New York, McGraw-Hill, 1995).

[238] Verspagen also proposes a non-linear form of equation (3), namely:

$$\Phi^c = \beta_0 + \beta_1 P + \beta^c_2 G^c_0 exp^{\beta 3(G_0/E)} + \varepsilon$$

β_1 estimates the effect of an exogenous rate of knowledge growth in the backward country (proxied, for example, by patent data, R&D expenditures, etc. and represented by variable P). The third term introduces a non-linear relationship between the initial gap and a parameter E measuring endowments of human capital, education, infrastructure, etc. B. Verspagen, "A new empirical approach to catching up or falling behind", *Structural Change and Economic Dynamics*, Vol. 2, No. 2, 1992, pp. 359-380.

[239] See R. Stehrer, M. Landesmann and J. Burgstaller, op. cit., for details.

TABLE 4.7.1

Cross-country regression of the growth of productivity and wages per head on initial gaps in manufacturing industry[a]

	Output per employee	*Value added per employee*	*Wages per employee*
Coefficient	-0.024	-0.018	-0.016
t-value	-4.940	-3.575	-4.171
Std. Dev.	0.005	0.005	0.004
R^2	0.449	0.299	0.367
$\bar{R}^2$	0.430	0.275	0.346
F-value	24.410	12.780	17.400

Source: Basic data from UNIDO statistics.

a Estimated over the period 1965-1995 for a large country data set comprising all the OECD countries and a group of Asian and Latin American economies.

TABLE 4.7.2

Results of cross-country, catching-up regressions for selected industries[a]

	Output per employee	*Value added per employee*	*Wages per employee*
Textiles 321			
Coefficient	-0.025	-0.024	-0.017
t-value	-5.131	-3.707	-3.697
Std. Dev.	0.005	0.006	0.005
R^2	0.467	0.314	0.336
$\bar{R}^2$	0.450	0.291	0.311
F-value	26.330	13.740	13.670
Wearing apparel 322			
Coefficient	-0.015	-0.016	-0.018
t-value	-1.624	-2.638	-4.466
Std. Dev.	0.009	0.006	0.004
R^2	0.081	0.188	0.408
$\bar{R}^2$	0.050	0.161	0.387
F-value	2.634	6.960	19.950
Machinery (except electric) 382			
Coefficient	-0.035	-0.030	-0.018
t-value	-5.440	-5.557	-4.799
Std. Dev.	0.006	0.005	0.004
R^2	0.505	0.516	0.451
$\bar{R}^2$	0.488	0.499	0.432
F-value	29.600	30.880	23.030
Machinery electric 383			
Coefficient	-0.033	-0.029	-0.016
t-value	-5.190	-3.898	-3.832
Std. Dev.	0.006	0.008	0.004
R^2	0.473	0.336	0.336
$\bar{R}^2$	0.456	0.314	0.313
F-value	26.930	15.190	14.690

Source: Basic data from UNIDO statistics.

a Estimated over the period 1965-1995 for a large country data set comprising all the OECD countries and a group of Asian and Latin American economies.

(ii) Product quality catching up by CEE producers in EU markets

We start again with estimates for a large sample of countries.[240] The "product quality" indicator was calculated for each year from 1977 to 1996 (the values for 1980-1982 were interpolated because the data were lacking). The specific industries (ISIC classification) are 321 (textiles), 322 (wearing apparel), 323 (here leather products and footwear are subsumed), 382 (mechanical engineering), 383 (electrical engineering) and 385 (professional goods).

It is also necessary to identify a "price/quality leader" on whom the other countries converge, since actual price leadership can change according to industry and over time. A group of countries comprising the six core EU countries (Belgium, France, Germany, Italy, the Netherlands and the United Kingdom) and the United States were chosen to play this role (referred to as USAEUN).

Cross-country industry-level regressions on quality catching up

To allow for differences in convergence between industries they were divided into two groups (engineering, comprising ISIC industries 382, 383, 385; and textiles, clothing and leather products, comprising ISIC industries 321, 322, 323) and into country groups. From 1993, the country groups consist of the Czech Republic, Hungary, Poland, Slovakia, Slovenia and the Baltic states (CEECW) and Bulgaria, Romania, Russia, Ukraine and the rest of the CIS countries (CEECE). Unfortunately, the number of industries and years here is too small to dig deeper into differences across countries and country groups.

The estimated linear regressions, are given in table 4.7.3.[241] The first case comprises 18 countries from the above-mentioned groups and the β-coefficients are negative and significant. The average half-life of the gap, based on the equation including all six industries, is approximately 33 years. Convergence is more rapid in the textiles, clothing and leather products industries. The panel regressions show a similar picture.

In a second step, only the seven CEECs (Bulgaria, the Czech Republic, Hungary, Poland, Romania, Russia and Slovenia) are included in a sample with data starting in 1991. The estimated rate of convergence is much higher leading to an average half-life for a closure of the gap of about 10 years (when covering all six industries). Again, the process is faster for textiles, etc., while the coefficient is insignificant for the engineering industries probably because of a slow rate of closure of the gap in

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[240] The country sample is wider than the one used for the productivity and wage catching-up analysis above. It includes again the southern EU economies and a wider range of Asian and Latin American economies.

[241] To save space the results from the panel regressions are not presented. These are included in R. Stehrer, M. Landesmann and J. Burgstaller, op. cit. and available at www.wiiw.ac.at.

TABLE 4.7.3

Linear regression results for catching up in product quality (export unit values)

	Total (6 industries)	*Textile industries*	*Engineering industries*
18 countries [a]			
Coefficient	-0.021	-0.036	-0.016
Std. Dev.	0.005	0.008	0.007
t-value	-4.339 [b]	-4.642 [b]	-2.338 [c]
R^2	0.152	0.293	0.097
$\bar{R}^2$	0.144	0.279	0.079
F-value	18.830 [b]	21.540 [b]	5.470 [c]
Obs	107	54	53
7 countries [d]			
Coefficient	-0.068	-0.064	-0.052
Std. Dev.	0.023	0.023	0.055
t-value	-2.969 [b]	-2.770 [c]	-0.940
R^2	0.181	0.288	0.045
$\bar{R}^2$	0.160	0.250	-0.006
F-value	8.810 [b]	7.670 [c]	0.880
Obs	42	21	21
11 countries [e]			
Coefficient	-0.149	-0.133	-0.164
Std. Dev.	0.024	0.027	0.045
t-value	-6.316 [b]	-4.929 [b]	-3.617 [b]
R^2	0.384	0.439	0.297
$\bar{R}^2$	0.374	0.421	0.274
F-value	39.890 [b]	24.300 [b]	13.090 [b]
Obs	66	33	33
6 countries [f]			
Coefficient	-0.193	-0.180	-0.208
Std. Dev.	0.024	0.042	0.038
t-value	-8.100 [b]	-4.267 [b]	-5.491 [b]
R^2	0.659	0.532	0.653
$\bar{R}^2$	0.649	0.503	0.632
F-value	65.600 [b]	18.210 [b]	30.150 [b]
Obs	36	18	18

Source: Basic data from UNIDO statistics.

a Southern EU, South America, South-east Asia, China and India.

b Significant at the 1 per cent level.

c Significant at the 5 per cent level.

d Since 1991, Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovenia.

e Since 1993, Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovakia, Slovenia, Ukraine, Baltic states, rest of CIS.

f Since 1993, Czech Republic, Hungary, Poland, Slovakia, Slovenia, Baltic states.

some of the CEECE countries especially for industries 382 and 385. This is confirmed by a highly significant estimate of β_1 of –0.094 (resulting in a half-life of 7.37 years) when the regression includes only the four "western" CEECs.

For the period after 1993, it is possible to include more transition economies (Slovakia, the group of Baltic states, Ukraine and a "rest of CIS" group); the estimated coefficient then rises to -0.149, with an estimated average half-life of the gap of 4.65 years (in the linear regression including all industries). The closure of the gap in export prices seems to be somewhat faster for engineering industries, with again the more "western" CEE countries being able to reduce the gap more rapidly (see the estimates for the six countries). The high values obtained for the rate of convergence parameter from the regressions for the CEECs (those from the panel regressions were even higher) may be due to a non-linear relationship between the initial gap and the speed of convergence which is not taken into account here. Such non-linearity would imply an eventual slowing down of the rate of convergence. Also, some of the results given here are not statistically reliable because of the small number of degrees of freedom in some of the panel estimations.

Nevertheless, the analysis of catching-up processes in product quality, proxied by export prices, complements well the analysis of productivity levels and of wage rates in sections 4.4 and 4.7(i). In general there is significant (econometric) evidence for convergence in export prices across a wide range of international suppliers. While the estimated catching-up parameters for the large sample of suppliers to EU markets (including those from southern Europe, South America and south and south-east Asia) over the period 1977-1996 were larger for the more labour-intensive branches (textiles, clothing and leather products) than for the technologically more sophisticated engineering branches, the opposite was the case for the central and east European countries over the shorter period 1991-1996 and even more so for the group of "western" CEECs. Hence, the conclusion in section 4.7(i) concerning the potential for a relatively fast catching up in the more advanced engineering branches in the case of the more advanced group of CEECs is supported by the analysis of catching up in export prices or product quality.

4.8 FDI involvement by branch

FDI in the transition economies has attracted a lot of attention both in research as well as in policy discussion. The topic is also a very important one for the subject matter of this paper, as much research has shown that FDI acts as a very important agent of change in transition economies. In fact, most of the company level analysis available[242] indicates that it provides the indispensable

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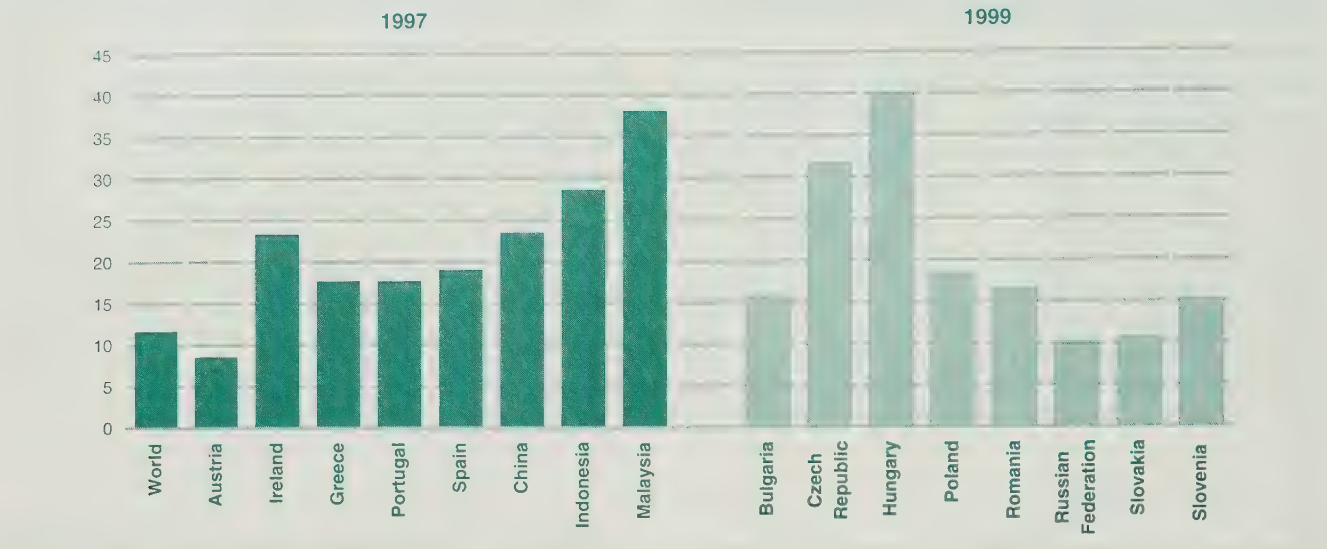
[242] See, for example, W. Carlin, J. Van Reenen and T. Wolfe, *Enterprise Restructuring in the Transition: An Analytical Survey of the Case Study Evidence from Central and Eastern Europe*, EBRD Working Paper, No. 14 (London), 1997; W. Carlin, S. Estrin and M. Shaffer, *Measuring Progress in Transition Towards EU Accession: A Comparison of Manufacturing Firms in Poland, Romania and Spain*, EBRD Working Paper, No 40 (London), 1999.

CHART 4.8.1

FDI stock as a percentage of gross domestic product, 1997 and 1999
(Percentages)



Source: WIIW Industrial Database complied from UNCTAD statistics.

change of governance structure needed for "active restructuring". The available research in this area is vast but a few select points can be emphasized:

- Those CEECs which were able to attract substantial FDI are now among those economies with the strongest FDI presence in their economies;
- It can be shown that foreign investment enterprises (FIEs) are more capital intensive and invest more, show higher productivity levels and are more export oriented than the domestically-owned enterprises (DEs);
- While there is a wide range of motives for foreign capital to get involved in different branches (domestic market orientation, export base, strategic actions to obtain early entry advantages vis-à-vis competitors, etc.) there is no sign that FDI in the CEECs is mostly oriented towards labour-intensive, low-skill, or domestic market-oriented manufacturing branches.

We shall now proceed to present some supportive material for the above points.

Chart 4.8.1 shows the importance of FDI in the CEECs by giving the value of the FDI stock in relation to GDP. Also shown are the values for a range of non-CEE economies some of which, over the 1990s, were among the largest recipients of FDI (in relation to the size of their economies). Some of the CEECs have joined the small group of leading countries for FDI, which is remarkable given that the stock was accumulated over a much shorter period than was the case for the other economies. Before 1990 there was hardly any FDI at all in the transition economies.

However, the unevenness of the FDI presence in the CEECs is very clear, a fact which is well known and does not need to be discussed further here. An examination of FDI flows over time also reveals, among other things, the importance of privatization, its timing and when or whether the participation in the processes was opened to foreigners. This, of course, also affects the distribution of FDI across sectors and branches (see below).

Turning to performance measures of FIEs in relation to general performance,[243] table 4.8.1 presents the shares of FIEs in the manufacturing sectors of the CEE-5 in relation to a number of variables (equity capital, employment, investment, sales or output, exports).

FIEs are clearly more strongly represented in sales or output than in employment; hence the levels of (labour) productivity are higher than the manufacturing average. They are also more strongly represented in investment than in either sales or employment; hence their investment/sales and investment/employee ratios – i.e. their investment intensities – are higher than the national average, as are the capital intensities as measured by assets per employee. Finally, their export shares are higher than their sales/output shares; hence they are more export intensive than the national

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[243] We rely here on research by G. Hunya who compiled within an ACE research network a database on FIEs from company level balance sheets. G. Hunya, "Foreign direct investment in CEEC manufacturing", in M. Landesmann (ed.), *Structural Developments...*, op. cit., chap. 5. FIEs are defined as companies with some degree of foreign ownership. This broad definition is less restrictive than it seems at first sight, as foreign ownership means in most cases a decisive influence on the governance structure.

TABLE 4.8.1

The share of foreign investment enterprises (FIEs) in key variables of manufacturing industry, 1996 and 1997
(Per cent)

	Equity capital	*Employ-ment*	*Invest-ment*	*Sales/ output*	*Export sales*
Czech Republic[a]	21.5[b]	13.1	33.5	22.6	..
Czech Republic 1997[c]	..	16.0	31.2	26.3	42.0
Hungary	67.4[d]	36.1	82.5	61.4	77.5
Hungary 1997	71.8[d]	42.8	79.8[e]	66.7	75.4
Poland[f]	30.4	15.0	43.1	30.3	33.8
Slovakia[c]	19.4	13.0	24.7	21.6	..
Slovenia	15.6	10.1	20.3	19.6	25.8

Source: G. Hunya, "Foreign direct investment in CEEC manufacturing", in M. Landesmann (ed.), *Structural Developments in Central and Eastern Europe. WIIW Report 1999*, The Vienna Institute for International Economic Studies (Vienna), chap. 5.

[a] Companies with 100 and more employees.

[b] Own capital.

[c] Companies with 25 and more employees.

[d] Nominal capital in cash.

[e] Compared to the whole industry; corresponding figure for 1996: 68.6 per cent.

[f] Corporate sector.

manufacturing firms in total. These ratios highlight some of the key features of and the role which FIEs play in the CEE economies.

Table 4.8.2 shows the distribution of FIEs across manufacturing branches in four of the CEECs and picks out those branches where they are most heavily involved. It shows that FIE involvement is strong in a number of capital-intensive, skill-intensive and export-intensive industries (particularly, transport equipment and electrical and optical equipment) although they are also present in domestic market-oriented industries such as food, beverages and tobacco and some natural resource-intensive ones (pulp and paper in Slovenia, non-metallic minerals in the Czech Republic). The distribution of FIEs across branches gives another indication of the "revealed comparative advantage" of CEE economies, which is complementary to the analysis of trade flows (analysed in section 4.6 above). For reasons of space this point is not elaborated in this paper.

Further research could build on the comparisons referred to above between FIEs and DEs. A deeper analysis is needed of the possible development of "dual structures' in the CEECs between the FIE and the DE sectors and whether performance indicators converge or diverge between them over time. Little detailed research is currently available on this question or on the extent of "spillovers" between FIEs and DEs in a wider sense (i.e. not only in the same sectors but also across sectors) and on the method of technology and know-how diffusion (through subcontracting and supplier networks, human capital and knowledge transfers, etc.)

TABLE 4.8.2

The most significant FIE industries, ranked by output/sales ratio, 1996
(Per cent)

	FIEs' share in total output/sales of the industry (penetration)	*Share of industry in total manufacturing FIE output/sale (specialization)*
Czech Republic		
Transport equipment	55.0	28.0
Non-metallic minerals	45.6	11.0
Rubber, plastic	43.8	5.9
Electrical, optical equipment	30.7	8.7
Manufacturing n.e.c.	28.2	4.2
Food, beverages, tobacco	24.7	18.8
Total manufacturing	22.6	76.6
Hungary		
Coke, Petroleum	99.2	15.6
Transport equipment	84.1	10.2
Food, beverages, tobacco	51.1	20.9
Electrical, optical equipment	65.1	12.7
Chemicals	78.7	11.8
Paper, publishing	71.6	7.2
Total manufacturing	61.4	78.4
Slovenia		
Transport equipment	82.3	40.3
Machinery, equipment n.e.c.	21.3	9.7
Electrical, optical equipment	20.1	9.5
Pulp, paper, printing	19.8	8.5
Chemicals	17.4	9.0
Rubber, plastic	15.9	3.8
Total manufacturing	21.1	80.8
Slovakia		
Transport equipment	61.4	26.3
Electrical, optical equipment	37.0	9.5
Paper, printing, publishing	25.6	7.9
Textile and textile products	18.9	3.3
Machinery, equipment n.e.c.	17.2	6.8
Food, beverages, tobacco	16.5	12.2
Total manufacturing	21.6	66.0

Source: As for table 4.8.1.

4.9 Structural change in central and eastern Europe, EU accession and the further course of east-west European integration: concluding remarks

Before concluding with some remarks on the possible impact of the EU accession process on the CEECs, it may be useful to recall the principal results of this paper:

- Large-scale de-agrarianization, deindustrialization and tertiarization have taken place in the CEECs since 1989; the re-agrarianization observed in Bulgaria and Romania is judged to be a transitory phenomenon, reflecting the dramatic job losses in manufacturing and the slow development of alternative opportunities in the tertiary sectors of these economies;

- There were large (and possibly irreversible) declines in overall employment levels and employment rates, as well as changes in gender-specific participation rates;
- Industrial restructuring since 1989 has gone through a number of phases with differences across the CEE economies: in the most successful of the transition economies, as in the others, there was a dramatic transformation crisis in the first phase 1989-1992, followed by the beginnings of sustained growth (Poland). Others experienced secondary transformation crises (Hungary in the mid-1990s, Czech and Slovak Republics in the late 1990s), but also appear to have moved onto a sustained growth path. Other CEECs still face the prospect of further transformation crises;
- The pattern of industrial restructuring shows considerable diversity across the CEECs. The degree to which productivity increases are achieved through output growth or employment loss (or both), the degree to which output growth is strongly driven by exports or domestic demand, the degree to which wage growth lags behind or exceeds productivity growth, and thus affects cost competitiveness, etc., are all examples of such diversity. An interesting pattern of relative catching up across industrial branches is also apparent, but this reflects the experience of a large number of catching-up economies not just the more successful CEECs. Productivity catching up is more rapid in the medium- to higher-tech industries (such as engineering), while wage catching up is more evenly spread across branches. As result, the successful economies are gaining competitive advantages in the medium- to higher-tech industries and moving away from the low wage, labour-intensive branches;
- The analysis of trade with the EU also shows considerable differentiation among the CEECs. In 1989, the CEECs' general trade profile with the EU was typical for a less developed trading partner. Exports were mostly labour intensive and energy intensive and there were substantial deficits in R&D-, skill- and – to a lesser extent – capital-intensive branches. Over the past decade, however, the more advanced of the CEECs have markedly changed their specialization relative to the EU: specialization advantages in R&D-, skill- and capital-intensive areas have increased significantly, while those in labour-intensive branches have been substantially reduced. The star performer in this respect is Hungary, but these changes in trade specialization have also occurred in the Czech Republic and Slovenia. Bulgaria and Romania, in contrast, seem to be stuck in the specialization profile typical for less developed economies, while Poland occupies an intermediate position;
- In parallel with the change in the pattern of interindustry trade specialization, there have also been substantial changes in the quality of products produced and exported by CEE producers (i.e. in their position in "vertically differentiated" intra-industry trade). In 1989/1990 the CEE economies were at the very low quality end of the product spectrum. Econometric estimates show, however, a rapid catching up in the quality of exports from the CEE-5 between 1989 and 1996. Again, Bulgaria, Romania and Russia lag far behind in this respect;
- Finally, the important role of FDI was emphasized in developing sectors with an above-average investment propensity, productivity growth and export intensity. It was also shown that FDI was not primarily attracted towards the low wage, labour-intensive branches in the CEE-5 group.

We now conclude with some remarks on the impact of EU accession of some of the candidate countries on the further processes of structural transformation in CEECs and on patterns of east-west European integration.

East-west European economic integration has proceeded at a very rapid rate since the beginning of the transition process in 1989. It has led to a considerable increase in trade integration and to substantial FDI flows which, together with other forms of cross-border corporate activities, such as outward processing trade, have paved the way to important production linkages between central and eastern Europe and Western Europe. At least at the start of the transition, there were also substantial population and labour flows from the CEE to the EU and, with EU accession, these are expected to increase again. Thus, there are three basic forms of integration:

- through product markets via increased trade flows;
- through capital markets via FDI and other forms of cross-border firm activities;
- through labour markets via the international or interregional mobility of labour.

There are important issues involved in the extent to which these three different channels complement or substitute for one another. There is a large theoretical literature analysing which of the two outcomes is likely to be the case.[244] This issue is important for being able to evaluate the extent to which full accession to the EU – which implies full liberalization of all three channels – will affect the structures of east-west European integration. At present, integration is proceeding almost solely through the first two channels which are mostly, but not fully, liberalized, while the third is very restricted. Even as regards the first two channels, full membership of the EU implies a further regime change since full membership of the Single Market involves a dismantling of border controls, complete liberalization of access by member firms to each others' markets, the adoption of

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[244] J. Markusen, "Factor movements and commodity trade as complements", *Journal of International Economics*, Vol. 14, 1983, pp. 341-356.

EU competition policy rules, of the Common External Trade Policy, etc. This amounts to a much higher degree of liberalization of economic relationships between the CEECs and the EU and, as such, will have a further impact upon the patterns of integration and specialization in Europe.

Increased integration between the acceding countries and the EU will also affect the countries which are lagging behind in the accession process. There is a discussion among economists as to whether the sequential process by which EU accession will most likely proceed will have negative or positive effects on the "laggards", the "left-outs" and the "stay-outs".[245] The issue is whether the ease of access to EU markets, the increased attractiveness for FDI, the speeding up of convergence in macroeconomic and microeconomic policies and in the legislative process of the "first-rounders" will increase further the gaps between them and the other transition countries or whether the movement of the EU borders to the east will yield the benefits of contiguity and of spillovers to those countries which do not have the prospect of joining the EU in the short or even medium term.

The enormous diversity in the development patterns of the different CEECs has emerged clearly in almost every section of this paper, with very dynamic patterns of catching up being observed in some of the CEE countries bordering the EU and sluggishness in structural (including behavioural) transformation in the countries further east. Whether this differentiation process will continue is closely linked to the issue discussed above, namely, whether EU accession of the first group of candidate countries will further increase the gap between them and the other CEE economies and, furthermore, whether patterns of structural change and specialization in the latter become rigid ("hysteretic effects") or will gradually follow the developmental patterns observed in the more advanced transition economies. Economists are unable to forecast which of these two scenarios is the more likely.

It is clear that structural change (just as the transition process itself) has quantitative as well as qualitative dimensions. The quantitative aspect (as evidenced by the analysis of "convergence in structures" or by purely quantitative measures of the catch up in productivity) do convey the outward symptoms of differences in developmental levels and the extent of catching up and convergence in structural or behavioural terms. However, there is a qualitative side to the transformation process which requires a deeper analysis of the interaction between institutional and behavioural changes, of the transformation of organizational structures at the microeconomic level, of the complicated interface between political, economic and cultural change which, ultimately, determines why transformation takes one course rather than another, whether or not development occurs at all, and why the conditions for EU accession can be fulfilled within a particular time horizon in some CEECs and not in others. It is clear that our understanding of the qualitative side of transformation and developmental processes is far less advanced than of the quantitative (or quantifiable) side and the analysis of this paper is testimony to this. Nonetheless, the description and systematic assessment of "symptoms" is a necessary component of a proper diagnosis.

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[245] On this issue, see the contributions in M. Landesmann and D. Rosati (eds.), *The Shape of the New Europe – The Economic Implications of EU Enlargement* (London, Macmillan, 2000), forthcoming.

APPENDIX

Factor intensities used in trade structure analysis

	NACE 3-digit	Capital intensity	Labour intensity	R&D intensity	Skill intensity	Energy intensity
Iron and steel industry (as defined in ECSC Treaty)	221	7.37	7.29	0.6	33.4	10.47
Manufacture of steel tubes	222	3.16	9.48	0.6	33.4	5.02
Drawing, cold rolling and cold folding of steel	223	5.04	8.85	0.6	33.4	3.26
Production and preliminary processing of non-ferrous metals	224	6.64	6.03	0.65	33.4	7.85
Manufacture of clay products for constructional purposes	241	6.61	14	0.6	29.5	13.26
Manufacture of cement, lime and plaster	242	12.48	6.24	0.6	29.5	19.4
Manufacture of concrete, cement or plaster products for construction	243	5.2	9.93	0.6	29.5	3.41
Manufacture of articles of asbestos (except articles of asbestos-cement)	244	3.94	17.78	0.6	29.5	3.16
Working of stone and non-metallic mineral products	245	7.5	10.12	0.6	29.5	8.22
Production of grindstones and other abrasive products	246	2.56	14.01	0.6	29.5	2.09
Manufacture of glass and glassware	247	5.59	12.7	0.6	29.5	7.85
Manufacture of ceramic goods	248	3.12	17.43	0.6	29.5	5.75
Manufacture of paint, painter´s fillings, varnish, printing ink	255	4.13	8.59	4.21	53.2	1.97
Manufacture of other chemical products, mainly for industrial and agricultural purposes	256	7.71	7.02	4.21	53.2	4.57
Manufacture of pharmaceutical products	257	6.13	7.81	9.48	53.2	1.52
Manufacture of soap, synthetic detergents, perfume	258	5.39	6.83	4.21	53.2	1.12
Manufacture of other chemical products chiefly for household	259	5.93	8.59	4.21	53.2	1.93
Man-made fibres industry	260	8.47	8.15	0.59	41.6	7.57
Foundries	311	3.35	15.14	0.59	28.7	6.48
Forging; drop forging, closed die-forging, pressing and stamping	312	3.74	12.92	0.59	28.7	4.42
Secondary transformation, treatment and coating of metals	313	3.42	15.8	0.59	28.7	3.26
Manufacture of structural metal products (including integrated assembly)	314	2.38	12.29	0.59	28.7	1.24
Boiler-making, manufacture of reservoirs, tanks, sheet-metal containers	315	2	13.2	0.59	28.7	1.2
Manufacture of tools and finished metal goods (except electrical equipment)	316	3.44	13.75	0.59	28.7	1.82
Manufacture of agricultural machinery and tractors	321	2.88	10.66	1.18	40.9	1.46
Manufacture of machine tools for working metal	322	3.61	14.09	1.18	40.9	1.42
Manufacture of textile machinery and accessories	323	3.94	12.45	1.18	40.9	1.18
Manufacture of machinery for the food, chemical, related industries	324	2.94	11.75	1.18	40.9	0.92
Manufacture of plant for mines, iron and steel industry and foundries	325	2.62	11.2	1.18	40.9	1.2
Manufacture of transmission equipment for motive power	326	3.99	15.95	1.18	40.9	2.17
Manufacture of other machinery and equipment for use in specific branches of industry	327	3.81	11.43	1.18	40.9	1.06
Manufacture of other machinery and equipment	328	3.14	12.38	1.18	40.9	1.7
Manufacture of office machinery and data-processing machinery	330	8.53	6.59	6.06	75.6	0.68
Manufacture of insulated wires and cables	341	4.4	9.71	6.83	48.4	2.24
Manufacture of electrical machinery (comprising electric motors, etc.)	342	2.56	14.41	14.3	48.4	1.65
Manufacture of electrical apparatus, batteries, accumulators	343	3.83	14.48	6.83	48.4	2.43
Manufacture of telecommunications equipment	344	4	14.2	6.83	48.4	0.94
Manufacture of radio, TV receiving sets, sound reproducing, etc.	345	5.36	10.89	6.83	48.4	1.19
Manufacture of domestic type electric appliances	346	3.83	12.33	6.83	48.4	1.27
Manufacture of electric lamps and other electric lighting equipment	347	3.28	14.64	6.83	48.4	1.73
Manufacture and assembly of motor vehicles and motor vehicles engines	351	6.69	7.49	3.43	29.9	1
Manufacture of bodies for motor vehicles	352	2.2	11.78	3.43	29.9	1.1
Manufacture of parts and accessories for motor vehicles	353	4.73	12.48	3.43	29.9	1.8
Shipbuilding	361	2.23	17.26	0.76	42.3	2.13
Manufacture of standard and narrow-gauge railway	362	1.91	16.29	1.22	42.3	2.18
Manufacture of cycles, motorcycles and parts and accessories	363	3.05	12.79	1.22	42.3	1.4
Aerospace equipment manufacturing and repairing	364	3.64	10.75	14.34	42.3	1.69
Other transport equipment	365	2.09	17.28	1.22	42.3	1.35
Manufacture of measuring, checking and precision instruments and apparatus	371	2.33	15.27	3.98	47.6	0.96
Manufacture of medical and surgical equipment and orthopaedic appliances	372	3.1	17.62	3.98	47.6	1.11
Manufacture of optical instruments and photographic equipment	373	4.55	16.09	3.98	47.6	0.99
Manufacture of clocks and watches and parts thereof	374	2.32	15.73	3.98	47.6	1.05
Manufacture of vegetable and animal oils and fats	411	8.91	3.02	0.24	37.2	1.9
Slaughtering, preparing and preserving of meat	412	3.76	6.97	0.24	37.2	1.86
Manufacture of dairy products	413	6.07	4.27	0.24	37.2	1.71
Processing and preserving of fruit and vegetables	414	5.88	8.06	0.24	37.2	2.1
Processing and preserving of fish and other sea foods fit for human consumption	415	3.47	11.53	0.24	37.2	1.92
Grain milling	416	8.2	3.16	0.24	37.2	1.91
Manufacture of spaghetti, macaroni, etc.	417	9.13	5.03	0.24	37.2	1.99
Manufacture of starch and starch products	418	12.03	4.51	0.24	37.2	4.99
Manufacture of cocoa, chocolate and sugar confectionery	421	4.66	8.96	0.04	37.2	1.68
Manufacture of animal and poultry foods (including fish meal and flour)	422	7.86	3.62	0.24	37.2	1.74
Manufacture of other food products	423	6.26	5.36	0.24	37.2	1.21

(For source and notes see end of appendix.)

APPENDIX (concluded)

Factor intensities used in trade structure analysis

	NACE 3-digit	*Capital intensity*	*Labour intensity*	*R&D intensity*	*Skill intensity*	*Energy intensity*
Distilling of ethyl alcohol from fermented materials	424	6.24	4.2	0.24	37.2	1.42
Brewing and malting	427	12.73	6.33	0.24	37.2	2.3
Manufacture of soft drinks, including bottling of natural spa waters	428	9.53	6.88	0.24	37.2	1.71
Knitting industry	436	2.11	16.14	0.14	27.1	1.72
Manufacture of carpets, linoleum and other floor coverings	438	3.95	10.53	0.14	27.1	2.94
Miscellaneous textile industries	439	3.21	15.65	0.14	27.1	3.23
Tanning and dressing of leather	441	3.21	7.38	0.59	28.7	2.19
Manufacture of products from leather and leather substitutes	442	1.42	18.14	0.59	28.7	0.76
Manufacture of mass-products footwear (excluding wood, rubber)	451	1.35	18.64	0.14	24.5	0.98
Manufacture of ready-made clothing and accessories)	453	1.09	20.39	0.14	24.5	0.82
Manufacture of household textiles and other made-up textiles goods	455	2.08	16.44	0.14	24.5	1.49
Manufacture of furs and of fur goods	456	1.27	15.25	0.14	24.5	1.94
Sawing and processing of wood	461	4.2	11.35	0.19	23.5	1.7
Manufacture of semi-finished wood products	462	6.42	9.56	0.19	23.5	3.14
Manufacture of carpentry and joinery components	463	3.1	13.39	0.19	23.5	1.6
Manufacture of wooden containers	464	2.29	16.17	0.19	23.5	1.88
Other wood manufactures (except furniture)	465	3.17	15.68	0.19	23.5	2.66
Manufacture of articles of cork, straw, other plaiting materials	466	2.51	17.76	0.19	23.5	1.6
Manufacture of wooden furniture	467	2.38	14.13	0.19	23.2	1.55
Manufacture of pulp, paper and board	471	12.43	6.68	0.14	48.8	8.53
Processing of paper and board	472	4.92	10.95	0.14	48.8	2.52
Printing and allied industries	473	4.18	11.68	0.14	48.8	1.48
Manufacture of rubber products	481	3.44	14.34	1.14	33.7	3.9
Retreading and repairing of rubber tyres	482	4.05	15.11	1.14	33.7	4.46
Processing of plastics	483	5.16	11.63	1.14	33.7	2.94
Manufacture of articles of jewellery, goldsmiths' and silversmiths' wares	491	2.05	10.57	0.59	35.2	1.39
Manufacture of musical instruments	492	1.69	17.69	0.59	35.2	1.31
Photographic, cinematographic laboratories	493	4.06	19.4	0.59	35.2	1.53
Manufacture of toys and sports goods	494	3.02	16.91	0.59	35.2	1.38
Miscellaneous manufacturing industries	495	2.84	17.46	0.59	35.2	1.53

Source: M. Landesmann, "The pattern of east-west European integration: catching up or falling behind?", in R. Dobrinsky and M. Landesmann (eds.), *Transforming Economies and European Integration* (Cheltenham, Edward Elgar, 1996); P. Havlik, "Structural change, trade specialization and competitiveness of manufacturing industry in the CEECs", in M. Landesmann (ed.), *Structural Developments in Central and Eastern Europe. WIIW Report 1999*, The Vienna Institute for International Economic Studies (Vienna).

Notes: Factor intensity definitions are as follows: capital intensity has been measured as cumulative (5-year) investment flows per employee; labour intensity as employees/output; R&D intensity as cumulative R&D flows (5 years) per employee; skill intensity as non-production workers/total labour force; energy intensity as energy inputs in total inputs. Some of these indicators (such as R&D) were not always available at the 3-digit level; in this case the 2-digit information has been applied to all the 3-digit NACE industries belonging to the 2-digit industry.

Discussion of chapter 4

4.A Paul Hare

Why are we interested in structural change in the transition economies, and if we are, what sorts of change might we expect to observe? Further, in answering such a question, do we expect to find marked differences among the transition economies in the pace and direction of structural change that they experienced during the 1990s? If so, what differences should we expect and what, if anything, can we say about the new "equilibrium" structures to which each economy is adapting itself?

In my view, there are two important reasons for looking at structural change in these economies: the first is by now historical, the second is much more forward looking. The first, historical, reason relates to the legacy of central planning, which we know gave rise to huge structural distortions in the economies concerned. Central planning's biases towards industry, and within that towards heavy industry (including the defence-related sectors), are well documented. Less well documented, though still enormously important, are the long-term structural distortions due to the inappropriate pricing of key productive inputs. Of these, the most damaging has probably been the failure to charge realistic prices for energy, either to domestic consumers or to firms, with the result that a great deal of consumption and production in the region used energy with an astonishing profligacy. As far as production was concerned, the relatively energy-intensive branches turned out to be enormously inefficient, so that with the onset of transition such branches would be expected either to invest massively to modernize themselves, or to cease production rapidly. In addition to energy, freight costs were treated as close to zero in much of the region, resulting in numerous highly unsuitable location decisions (especially in larger countries like the former Soviet Union), and land was usually treated as costless in enterprise accounts, resulting in exceptionally wasteful use of land.

Charging properly for transport and land must make some activities less profitable than formerly, and others relatively more profitable, while also changing the efficient location of many productive units.

This inheritance implies, therefore, that regardless of future economic trends and the pace of market oriented reforms, once central planning came to an end and more rational pricing and harder budget constraints came into force, one could already expect to witness much structural change – essentially putting right the worst mistakes of the past. Moreover, these needed adaptations were rather different in different countries. Thus freight costs are not such an issue in smaller countries – except to the extent that they participated, probably inefficiently, in the then international socialist division of labour – but will have a massive impact on the location of production in Russia.

Energy pricing, likewise, was not uniformly distorted, with Hungary charging near to world prices from the early 1980s (albeit with high subsidies to households), but much of the CIS regarding energy as almost free.

The second reason for being interested in structural change is, as indicated above, more forward looking. The transition economies can be regarded as low- to middle-income countries gradually transforming themselves into market-type economies. If we then look around the world and study the typical structures of economies at a similar stage of development, it is possible to develop a picture of the "typical" structure towards which transition economies might be expected to evolve. This structure involves a higher weight of services within GDP and less of agriculture than was the case for transition economies in 1990, and within industry a lesser weight for heavy industry.

Especially for smaller countries, restructuring would also be expected to entail much higher levels of trade in proportion to GDP, and that largely directed towards the developed market economies. All of this assumes, of course, that the transition economies will indeed turn out to be typical in this sense.

Adopting this as a working hypothesis, however, one can then assess how well the transition economies are adapting to the market by studying how far they have already changed towards this "typical" structure. This, in essence, is the perspective adopted by Michael Landesmann in his paper, and it proves to be both fruitful and very interesting. A further, and illuminating, dimension to this approach is provided by reference to the possible impact of EU enlargement, and the idea of convergence to economic structures characteristic of selected groups of EU member states.

The paper draws heavily on official statistics assembled in the Vienna Institute Industrial Database, and so naturally has nothing to say about phenomena not picked up there, such as the second or informal economy. Also, the paper focuses on a subset of the transition economies, with lots of analysis reported on the Czech Republic, Hungary, Poland, Slovakia and Slovenia (the CEE-5), and some on Bulgaria and Romania (the EE-2). The CIS and the Baltic states are hardly discussed at all, except for the occasional remark. Landesmann paints a complex and interesting picture of structural change during the transition, but much of the paper is heavily descriptive – though some findings are supported by simple regression analyses. Hence we learn a great deal about what happened in the transition economies over the last decade or so, in terms of various dimensions of structural change, but rather less about why it happened and why various changes might be interesting or important. Given this, my earlier remarks on the context of structural change in the region might help to provide a more developed framework for the paper.

A particularly interesting finding of the paper is that the CEE-5 are improving in productivity relatively more rapidly in medium and high technology branches and that this, combined with more uniform wage increases across each economy, is likely to change their comparative advantage in the same direction. Such a process, of course, is going on under the surface in any economy undergoing structural change, since expansion in some sectors generally entails drawing resources – notably labour – away from others, and this is exactly what the observed wage and productivity trends in central and eastern Europe will be signalling.

These changes are accompanied, it seems, by rather mixed evidence of convergence to EU industrial structures. In regard to trade structures, however, in particular trade with the EU, the CEE-5 show a strong shift away from labour-intensive export products, while exactly the opposite is the case for the EE-2. For narrowly defined products in the engineering sectors, product quality (as measured by export price gaps) was found to be improving rapidly in the CEE-5, not at all in the EE-2. Although there are no doubt special factors that might explain these observations, in essence they reflect transition economies at two stages – a group of five countries already a bit more advanced and striving to become full members of the EU at the earliest possible date, and a group of two still some way behind, perhaps also impeded for part of the 1990s by their unstable political configurations.

The production and trade findings in the paper are consistent with the results reported on the impact of foreign direct investment (FDI). Contrary to some expectations, FDI has not been concentrated in labour-intensive sectors, rather it has turned out to be particularly strong in several capital- and skill-intensive sectors, especially those with a strong export presence. This shows that FDI has probably contributed significantly to the improvements in relative product quality noted above. But further research is probably needed to clarify some of the complex connections involved here, notably linkages between FDI-supported projects and domestic supply chains and product marketing networks. At present, it is simply unclear how far the activities supported by FDI are tending to form isolated enclaves within the various transition economies, how far they are stimulating adaptation and new economic linkages more widely across these economies.

While noting the substantial diversity of restructuring experience in the different countries studied in depth in his valuable paper, Professor Landesmann concludes his survey of structural trends in the transition economies by making two key points:

- The five western countries (the CEE-5, namely the Czech Republic, Hungary, Poland, Slovakia and Slovenia) are performing well, are largely undergoing structural change in the expected directions, and in important sectors their exports are approaching EU quality levels (or at least moving markedly in the right direction);
- Bulgaria and Romania are both doing much less well, presumably in part because they started out from a lower level of development than the above group of countries, and in part because they have been more hesitant and far less consistent in their pursuit of economic reforms. These countries are still mostly exporting relatively labour-intensive goods, and there is not yet any solid evidence of relative quality improvements in their manufactured exports.

As noted above, the paper has little to say on Russia, Ukraine or other CIS countries, but what evidence is available is sufficient to indicate that structural transformation across the CIS has not yet progressed very far by comparison with the CEE-5.

The author not only reports on structural change in quantitative terms, but also offers some judgements about the observed changes. The latter seem to me to involve some quite difficult and indeed delicate considerations. First, they require us to take the “typical” middle-income economic structure (or EU economic structure) as a norm, in the sense that countries conforming to it are considered “advanced”, those not conforming are considered “awkward”. While accepting this as a convenient starting point for some purposes, I think the approach requires a degree of caution and humility in its practical application.

Second, the failure of some countries to adjust thus far could be due to perfectly legitimate reasons, for instance continuing difficulties in establishing effective post-communist government structures, or the sheer cost and difficulty associated with undoing the legacies of the past. Third, for some countries the assumed structural norm may not be valid at all, and even if there is structural change it might entail a different long-term structure altogether. For example, in the landlocked central Asian republics belonging to the CIS, it is surely likely that equilibrium relative prices (including the relevant world market prices for these countries) will be much different from those applicable to European Russia and points to the west. I am unaware of studies exploring this issue in concrete terms, but would not be surprised to find that equilibrium economic structures in these countries differed greatly from those that make sense for the more advanced transition countries bordering the European Union.

Finally, how far does the sort of careful empirical work undertaken in Professor Landesmann's paper take us in terms of possible implications for economic policy, either of the transition economies themselves or of partner countries or groups of countries such as the EU? The paper certainly confirms that countries with rapid reforms and lots of FDI have been performing better than those more hesitant about reform and unable to attract much FDI, and to that extent – at least implicitly – takes a clear stance on economic policy. However, this simple-minded interpretation of what the paper might be telling us about economic policy cannot be the full story, since it only makes sense for those countries on track for EU accession before very long. Hence the paper – useful though it is – does not provide policy guidance that can be generalized much beyond the list of countries actually studied.

For other transition countries, unlikely to join the EU either in the first wave or at all, a very different story will have to be told, since their political conditions, resource endowments, and trading opportunities differ greatly from those available to the countries expecting to accede to the EU. To tell this alternative story adequately will require additional research and a new paper.

4.B Andras Nagy

The secretariat of the Economic Commission for Europe deserves much praise for choosing Professor Landesmann (and the Vienna Institute) to overview in such a multi-faceted manner what has really happened in the transition economies since the beginning of their systemic change. The Vienna Institute has perhaps the best database on this region, and a well-experienced group of researchers helping Professor Landesmann to prepare his fine analysis.

Professor Landesmann's paper provides an excellent account of the structural changes in the transition economies, and I agree with most of his statements and observations. However my role as a discussant is not to enumerate and to evaluate the merits of the paper, but to express some doubts as to some of his viewpoints and the limitations he has imposed upon himself. For the purpose of his paper, he defines his topic as changes in the structures of output, employment, exports, etc. and how these variables relate to each other. In the last sentence of the introduction he enumerates the important issues linked to structural changes that were left out of his analysis: institutional change, the geographic distribution of economic activities, the distribution of income and wealth and micro-level changes.

In my opinion, it is a pity that these very important aspects were left out of his inquiry. The masterful handling of a vast database and of up-to-date econometric methods leaves much of the analytical potential unused, especially as regards the causes and consequences of structural change. Among the causes, the inherited and evolving new institutions play a primordial role, and drawing attention to them in the transition process (as already mentioned by Professor Berglöf) is indispensable if policy implications are to be derived from the findings. On the other hand, changes in production, productivity, and especially in trade and capital movements cannot be explained without considering the effects of the reorientation of economic activities from the CMEA to the European Union. Within the limits of my contribution, I intend to deal with these two issues, although I think the income-distribution problem is just as relevant.

The importance of institutional change

The paper documents well and is convincing in its account of the very important structural changes that have taken place in the last decade in the transition countries in production, employment, productivity, trade, etc., and it brings out the very divergent changes in the countries reviewed. Even if there are doubts about the reliability of some of the data used, the results in most cases correspond to intuitional expectations and other observations about the evolution of these economies. However, the reader remains unsatisfied with the description of these changes if one of the major questions is not asked: what are the reasons for such differences in the catching-up and integration process between countries?

Professor Landesmann is well aware of this problem, and in the last paragraph of the paper he concludes: "there is a qualitative side to the transformation process which requires a deeper analysis of the interaction between institutional and behavioural changes … of the complicated interface between political, economic and cultural change which, ultimately, determines why transformation takes one course rather than another, whether or not development occurs at all and why the conditions for EU accession can be fulfilled within a particular time horizon in some CEECs and not in others". It is regrettable, however, that he did not even try to link the quantitative structural changes, so well described, to the qualitative side of the transformation process.

There can be little doubt that institutions and changes (or lack of change) in them are principally responsible for the great divergence in the economic performance and evolving structures among the transition economies. The unexpected collapse of the communist regimes was preceded by a long period during which resistance to change and reforms was regarded as stability, while at the same time it created a self-destructive instability. Under the guise of immobility, however, strongly divergent but significant changes occurred in the institutional structures, and in the mentalities of the population, which were inherited by the transition regimes. Surprisingly, the systemic transformation happened peacefully, without much violence. The beneficiaries of the soviet-type system put up unexpectedly little resistance, and a significant number of them actively cooperated in the demolition of totalitarian state socialism.

In the evolution of the central and east European (CEE) economies, more and more special interest organizations with collusive behaviour gradually emerged. Monopolies developed to an unprecedented extent in all fields of economic activity, eliminating all kinds of competition. These special interest organizations became powerful lobbies, fighting for investments, subsidies, favourable prices, export contracts of low-quality products, etc. This widespread monopolistic and protectionist institutional structure contributed largely to the stagnation and decline of the CEE societies. As the initial transition was peaceful, many of these lobbies and much of the totalitarian institutional structure were not abolished.[246] The survival of influential monopolies, and the mentality linked to them, created – and after 10 years still creates – significant obstacles to reform and economic restructuring. The need for a market-type transformation and privatization emerged within the socialist system, not only in the private sector and among the population, but in the ruling groups as well. As many institutions, top administrators and managers could retain their power and influence, a significant resistance to competition, opening, efficiency increase and deregulation could be perceived.[247]

Explaining the catch-up process of the west European economies vis-à-vis the United States in the 1950s and 1960s, Eichengreen[248] offered a non-Olsonian institutional explanation. According to him, it was mainly due to a cooperative arrangement, a "willingness for workers and capitalists to defer current compensation in return for future gains". Intensive modernization of technologies and fast export growth were made possible by "monitored compliance of economic interest groups with the terms of their agreement to moderate wage claims and boost investment". It seems that something similar is happening in the CEE-5 countries, even if both the trade unions and the employers' associations are less powerful (and more discredited). It would be an interesting comparative study to find out how this works without an explicit cooperative arrangement, and how far it can explain the divergent productivity, export and investment growth of the transition countries presented in such a many-sided way in the paper.

Another important aspect of institutional development is the different scale and scope of the emergence of small private businesses in the CEE countries. The transition to a market-type economy and the privatization process was especially assisted in those countries where the extent of private property had gradually increased before the political changes, and the opposite could be observed where it was not allowed.

To the surprise of many observers, the transition from a harsh police state to pluralistic democracy was accompanied by a significant weakening of the rule of law and by the declining efficiency of the police and the judiciary. Black, or shadow, economy and corruption have expanded, tax evasion is widespread, Mafia-type criminal activities abound and the defence of property is insufficient. There are great differences among countries in the extent of how far the rule of law has broken down, but it has influenced strongly the nature of structural change in the various economies.

The diverging economic achievements of the transition countries are strongly related to the scope, methods and timing of the privatization process. By this, I mean not only the differences between coupon privatization and the sale of state assets, but also the privileges given to the clients of the political forces in power, euphemistically called the "creation of a new, or national middle class". They are usually represented by lobbies fighting against the "selling out" of property to foreigners.

The paper rightly states that "FDI acts as a very important agent of change" and of "active restructuring", and shows very clearly how it influences employment, exports and growth. The inflow of foreign capital depends in great part on institutional arrangements, on the attraction or repudiation of multinational companies, on the bargaining of the authorities with them for different privileges, tax exemptions, and their efforts to monopolize certain sectors of the market.

The reorientation of central and east European trade

Structural change in trade has two strongly interconnected aspects: changes in its commodity composition and in the market allocation of imports and exports. The first is very well analysed in the paper, how trade specialization has developed with EU countries, but it remains one-sided without studying the modifications in the regional distribution of the CEE economies' trade.

I think it is important to raise the question as to how far trade was reoriented from the CMEA markets to the EU? Is it enough, or too much, how much trade creation and how much diversion occurred? Charts 4.B.1 and 4.B.2 show changes in the export shares of the CIS and east European countries between 1980 and 1997. The radical reorientation of trade after 1989 is highly visible: the share of western Europe in the exports of the CIS countries declined from 36 to 24 per cent in the 1980s, rose to 46 per cent in 1993, and fell back to 38 per cent by 1997. The same share in east European exports rose from 24 per cent in 1980 to 57 per cent in 1993 and to 62 per cent in 1997. Even if this increase in intra-European integration is remarkable, its level is still significantly below the export shares of Portugal or Spain, for example, with the other EU countries (82 and 71 per cent, respectively).

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[246] M. Olson, *The Rise and Decline of Nations* (New Haven, Yale University Press, 1982) and "The logic of collective action in Soviet-type societies", *Journal of Soviet Nationalities*, Summer 1991. According to Olson, the postwar "economic miracles" of Japan and west Germany were due in great part to the emasculation of the totalitarian institutional structure. See also C. Mueller, *Public Choice II* (New York, Cambridge University Press, 1989); A. Schotter, *The Economic Theory of Social Institutions* (New York, Cambridge University Press, 1981). In A. Nagy, "Social choice in eastern Europe", *Journal of Comparative Economics*, No. 15, 1991, pp. 266-283, I tried to show that the relatively fast economic development of central and east European countries at the end of the Second World War was also partly due to the elimination of the totalitarian political and economic structure. Nothing similar happened in 1989.

[247] For more detail see A. Nagy, "Transition and institutional change", *Structural Change and Economic Dynamics*, No. 2, 1994, pp. 315-327.

[248] B. Eichengreen, "Institutions and economic growth: Europe after World War II", in N. Crafts and G. Tonnio, *Economic Growth in Europe Since 1945* (New York, Cambridge University Press, 1996).

Chart 4.B.1 shows that the share of CIS trade to eastern Europe fell considerably from 53 to 12 per cent between 1989 and 1997, while intra-CIS trade rose to 18 per cent. The decline of the share of CIS markets in east European exports was considerable, from 34 to 9 per cent in the same period, while the share of intra-east European trade remained virtually stable in the same period (chart 4.B.2).

Studying changes in trade shares is not enough to answer the question of how the collapse of the highly protectionist and "introverted" CMEA trade, and the gradual opening to western Europe, affected the trade of transition countries. The use of *trade intensity* indicators to analyse the influence of trade policy has proved to be very effective and has been regularly used in ECE publications.[249] The trade intensity indicator captures the effects of many factors influencing trade flows between regions, apart from the overall volume change in total exports and imports. If the effect of trade policies, discrimination, integration, traditional links, distance, etc. do not have any influence on the bilateral trade between two regions, the value of the indicator will be unity. If these factors significantly reduce or increase the trade flow, the indicator will be less or greater than unity.

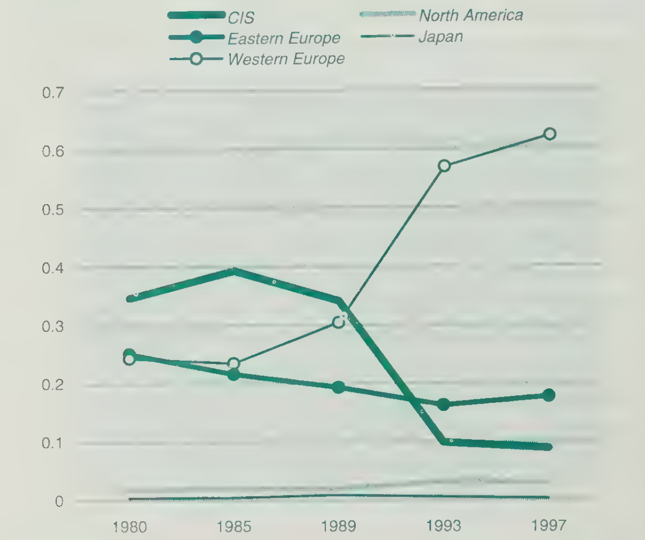
Table 4.B.1 below displays how trade intensities changed in two ex-socialist and three developed regions between 1980 and 1997.

Trade between the Soviet Union and the east European countries was very intensive in the last year before the collapse of the CMEA (with coefficients 16 and 14!). The indicators declined strongly thereafter, to 4.4 and 5.1.[250] The intraregional trade of the CEE countries remained relatively intense, six to seven times higher than the weight of the region in world trade. The intensity of east European exports to western Europe more than doubled, the coefficient increasing from 0.68 to 1.58 between 1989 and 1997. The increase in the opposite direction, i.e. from west to east, was even stronger, the intensity coefficient changing from 0.44 to 1.59. The trade intensities of the east European countries with the other two developed regions – North America and Japan – remained low, and much lower than that of their trade with western Europe.

On the basis of the changes in trade shares and trade intensity, it can be concluded that although the reorientation of CEE commerce was rapid and extensive, it cannot be regarded as exaggerated. Intraregional trade has remained intensive, and there is ample room for a further extension of trade to developed regions other than the EU and to the developing world.

CHART 4.B.1

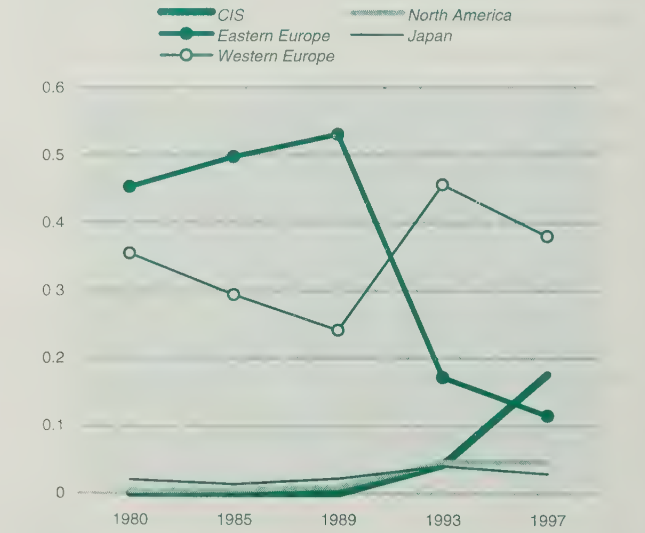
Export share of eastern Europe, 1980-1997
(Shares)



Source: United Nations, *Monthly Bulletin of Statistics,* various February and May issues, table D.

CHART 4.B.2

Export share of CIS, 1980-1997
(Shares)



Source: United Nations, *Monthly Bulletin of Statistics,* various February and May issues, table D.

Some remarks on the data, methods and conclusions

As a consequence of the institutional changes already mentioned, the quality and reliability of the data furnished by businesses and the statistical authorities deteriorated, or was subject to biases different from those prevailing during the socialist period. It is surprising that this is not even mentioned in Professor Landesmann's paper, and I fear that he puts excessive trust in the data he is using. As a Hungarian, for example, I should be pleased that according to his analysis, the performance of our economy is much better than those of other CEE countries. Without doubting the validity of his observation, I have the impression that – as a Hungarian saying goes – "the bride is too beautiful". I wonder, for example, to what extent the relatively high productivity figures of Hungary are due to the fact that many employees are not registered, or are employed as one-person "enterprises". Consequently, as their remuneration is not recorded among wages, productivity is lower, and unit labour costs and unemployment are higher in reality than according to the statistics.[251]

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[249] See UN/ECE, *Economic Bulletin for Europe*, Vol. 36, 1984 and Vol. 37, 1985; also see A. Nagy, "Methods of structural analysis and projection of international trade", Institute of Economics, *Hungarian Academy of Sciences Studies*, No. 13 (Budapest), 1979 and "CMEA integration and trade structure", in M. Panic and A. Vacic (eds.), *Economic Integration in Europe and North America*, Economic Studies, No. 5, UN/ECE (Geneva), 1995. A description of the method can be found in the *Economic Bulletin for Europe*, Vol. 36, 1984, p. 488.

[250] The rearrangement of countries in the regions does not make precise comparisons possible, but the general tendencies are valid.

If the black and shadow economy is widespread, production and income figures are obviously inaccurate, and the results of international comparisons become more unreliable. In GDP calculations countries use different methods to take into account at least one part of the unmeasured economic activities, which make such comparisons questionable. If smuggling and falsified reporting in the trade documents is extensive, trade statistics are less reliable and the results of comparisons are more uncertain. It is evident, of course, that researchers can only use the data that is available, but they should at least warn the reader about the margins of error in the different calculations. I am sure that most of the findings in Landesmann's paper are more robust than the uncertainties I have mentioned, but it is more convincing if this is made explicit.

The paper is on a very high technical level, showing the author's excellent knowledge of econometric methods and their application. However, I think he might have taken into consideration that the participants at this meeting are not all professors and researchers. Policy makers, managers, government representatives, etc. who are present or read the proceedings of this seminar may have difficulties in following the methods employed, and would probably benefit from more explanation of some of the results.

The last section of the paper is an excellent summary of the main findings of the research effort behind it. Those who cannot, or will not, go through all the details of the analysis are strongly advised to read and disseminate its contents. It contains a number of surprising, or non-intuitional, but convincing results, besides summing up many features of the structural changes in the transition economies.

Given that Professor Landesmann's analysis is founded on a huge database and robust econometric methods, it seems to me that his conclusions about the accession of the CEE countries to the EU are too restrained and cautious. The results presented in the paper, linked to the available knowledge about the institutional and behavioural changes behind them, could tell us more about the reasons for the conspicuous divergence of the various transition paths, and their probable future development. The statement in the last sentence of the paper is undoubtedly right, "the description and systematic assessment of 'symptoms' is a necessary component of a proper diagnosis". But my point is that we can already go beyond the description of the symptoms: we have many elements necessary not only for the diagnosis, but also for providing a "therapy" for the "ills" of the transition process, including the integration of two parts of Europe.

TABLE 4.B.1

Trade intensity indicators, 1980-1999
(Total trade)

	CIS	*Eastern Europe*	*Western Europe*	*North America*	*Japan*
CIS					
1980	–	10.883	0.790	0.027	0.327
1985	–	12.349	0.737	0.025	0.232
1989	–	15.996	0.537	0.049	0.358
1993	3.557	8.377	1.119	0.237	0.709
1997	10.105	4.366	0.967	0.247	0.557
Eastern Europe					
1980	11.045	6.018	0.541	0.117	0.059
1985	10.436	5.358	0.591	0.103	0.071
1989	13.618	5.814	0.677	0.104	0.142
1993	8.239	7.939	1.395	0.159	0.103
1997	5.084	6.679	1.580	0.159	0.066
Western Europe					
1980	0.689	0.550	1.517	0.423	0.162
1985	0.612	0.430	1.651	0.548	0.227
1989	0.591	0.439	1.603	0.456	0.344
1993	1.102	1.451	1.665	0.420	0.361
1997	1.090	1.591	1.686	0.441	0.380
North America					
1980	0.332	0.248	0.590	1.812	1.417
1985	0.338	0.084	0.507	1.951	1.535
1989	0.421	0.078	0.503	1.796	1.732
1993	0.558	0.206	0.474	1.815	1.570
1997	0.303	0.161	0.474	1.859	1.491
Japan					
1980	0.683	0.149	0.368	1.786	–
1985	0.416	0.080	0.357	1.976	–
1989	0.448	0.074	0.456	1.893	–
1993	0.365	0.089	0.436	1.585	–
1997	0.154	0.114	0.420	1.529	–

Source: United Nations, *Monthly Bulletin of Statistics*, various February and May issues, table D.

The main message of Landesmann's paper – and this is a very important one – is that rapid change and significant improvements in the economic performance of the transition countries are not only possible but are already underway. The paper presents convincing facts and arguments that the pessimistic views about EU enlargement and catching up – of which there is no shortage! – are unfounded if the necessary institutional reforms are introduced and sound economic policies followed.

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[251] The comparison with other countries would of course depend on how far these distortions differ from those in other countries.

CHAPTER 5

THE SOCIAL COSTS AND CONSEQUENCES OF THE TRANSFORMATION PROCESS

Michael Ellman[252]

"I want to ask you for forgiveness, because many of our dreams have not been realized, because what we thought would be easy turned out to be painfully difficult. I ask for forgiveness for not fulfilling some hopes of those people who believed that we would be able to jump from the grey, stagnating, totalitarian past into a bright, rich and civilized future in one go. I myself believed in this. It seemed that with one spurt we would overcome everything. But it could not be done in one fell swoop. In some respects I was too naive. Some of the problems were too complex. We struggled on through mistakes and failures. In this complicated time many people experienced shocks."

B.N. Yeltsin, Russian President 1991-1999
(Resignation Statement, 31 December 1999)

5.1 Introduction

In the decade 1989-1999 the Soviet empire collapsed, a number of states in central and eastern Europe disintegrated and new ones were formed, and the political-economic system throughout the region was transformed. During this transformation there have been sweeping social changes, frequently for the worse. The purpose of this paper is to survey these adverse phenomena, to the extent that the available data makes this possible, paying particular attention to the question of whether they were caused by the transformation, or by other factors, and whether existing accounts of these phenomena offer a fair picture. The main issues considered are: What were the costs? Who paid them? Why has there been so little political protest? How does the present system change in the region compare with the previous one?

5.2 What were the costs?

(i) Impoverishment

The available estimates about the numbers in poverty are always problematic. They depend on the source of the underlying data, the concept used (relative poverty, income-based measures of absolute poverty, the Leiden poverty line, etc.), the unit of observation (individuals, adult equivalents, households) and the time period (monthly, annual, five-year average). As far as the transformation countries are concerned, a leading role in the international debate has been played by the World Bank, and its income distribution specialist, Milanovic. His data have the advantage of being – in principle – internationally comparable, and of not being produced by a researcher or organization that might be considered to have an interest in painting an alarmist picture. Milanovic has presented the following data, which are based on an absolute poverty line of $4 (at 1990 international prices) per capita per day.

According to table 5.2.1, poverty in the early transition period, using the Milanovic estimates, increased from 3 per cent to 25 per cent of the population and from approximately 7 million to approximately 89 million, i.e. there appear to be 82 million new poor. (Nearly all the poor – 82 million or 92 per cent – live in Romania, Russia and Ukraine.) This is a very striking result. It suggests that one of the first results of the transformation was to impoverish a large part of the population of the countries concerned. It seems to have turned a quarter of them into poor, and generated 82 million new poor. Because of the sensitivity of estimates of the number of poor to measurement problems, not much weight should be placed on these precise numbers. Nevertheless, the general picture which emerges from the Milanovic data – of a substantial increase in poverty under transition and of a large number of people currently in poverty – is confirmed by a number of studies focusing specifically on Russia, the country which, according to table 5.2.1, in 1993-1995 had approximately two thirds of the poor in the region.

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[252] I am very grateful to N. Barr, M. Bernstam, D. Bezemer, N. Chandra, S. Clarke, G. Grossman, P. Ellman, V. Kontorovich, D. Lane, M. Harrison, V. Shlapentokh, M. Spoor, S. Stephenson and W. Swaan for helpful comments on the draft. The author alone is responsible for the interpretations offered and for the errors remaining.

TABLE 5.2.1

Poverty during the transition in selected transition economies, 1987-1995

(Percentage, millions)

	Percentage of population in poverty		*Total number of poor (millions)*	
	1987-1988	*1993-1995*	*1987-1988*	*1993-1995*
Belarus	1	14	0.1	1.4
Estonia	1	34	0.02	0.5
Hungary	1	7	0.1	0.7
Poland	6	10	2.1	3.8
Romania	6	48	1.3	10.8
Russian Federation	2	39	2.2	57.8
Ukraine	2	26	1.0	13.5
Total	2.7[a]	25.4[a]	6.82	88.5

Source: B. Milanovic, *Income, Inequality and Poverty During the Transition From Planned to Market Economy* (Washington, D.C., World Bank, 1998), pp. 67-77.

Note: These figures for 1993-1995 are based on expenditure data. The income data show higher levels of poverty but probably understate incomes. The figures for 1987-1988 are based on incomes.

a Unweighted arithmetic average.

The studies which concentrate on Russia tend to focus on particular data sets, or particular definitions of poverty. Clarke pointed out that if one uses official data and retains the objective approach, but defines poverty as half the official poverty (*prozhitochnyi minimum*) line, then the number of poor in Russia in 1996 would be not 57.8 million (as estimated by Milanovic for 1993-1995) but "only" about 15 million.[253] According to a study using the Russian Longitudinal Monitoring Survey and an objective poverty line (the official poverty line adjusted for regional price differences, household type and equivalent scales), the proportion of households with an income less than half of the poverty line rose almost sevenfold in 1992-1996 (from 3 per cent to 20 per cent).[254] According to this study, the biggest incidence of poverty was among children under six. The proportion of children in this age group in poverty rose from 15 per cent in 1992 to 44.5 per cent in 1996. In 1996 almost a quarter of children under six had a (share of household) income of less than half the poverty line. Researchers using the (subjective) Leiden poverty line showed that the (subjective) poverty line declined dramatically between March 1993 and September 1996 as people adjusted to their reduced economic status.[255] Research using the Leiden poverty line also showed a jump in the share of the population which was (subjectively) poor following the August 1998 crisis.[256] A general finding of all these studies is a much higher proportion of the population in poverty in Russia than in EU countries.

One result of impoverishment has been a worsening of the diet of many people. In Russia a significant problem of undernourishment seems to have developed, in particular among children in poor households.[257] According to this study, the current problem of child malnutrition "did not exist in the last pre-reform years". The idea that there was a significant increase in undernourishment among children is supported by data on stunting. It seems that stunting in Russian children under two increased from 9.4 per cent in 1992 to 15.2 per cent in 1994.[258] Poverty among children has affected not only their diet, but also their schooling, extra-school activities and social integration.

It seems to be widely thought that the decline in living standards in the former Soviet Union began in 1992 and directly followed a period of rapidly increasing living standards under the successful economic policies of the later perestroika period. However, no weight at all should be attached to calculations according to which at the very end of the Soviet period, average living standards in the USSR increased significantly. Such calculations simply confuse "*statistical* real incomes", calculated on the basis of data about money incomes and official prices, with "*actual* real incomes", which depend both on money incomes and on the availability of goods and the prices at which they are actually available. For example, Kakwani states that "The average standard of living in Ukraine increased quite significantly in the late 1980s. The 1989-1990 period registered an impressive growth rate of 7.4 per cent in per capita family income…".[259] When corrected by more accurate price indices and by the availability of goods, the so-called significant increase in the standard of living in Ukraine in 1989-1990, and hence also part of the subsequent decline in real incomes, would be exposed as statistical illusions. Although the collapse of the USSR and the abortive attempt to introduce a civilized market economy in its successor states undoubtedly caused many problems, no useful purpose is served by exaggerating them.

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[253] S. Clarke, "Poverty in Russia", in P. Stavrakis (ed.), *Problems of Economic Transition* (Armonk, NY, M. E. Sharpe, 1999).

[254] N. Zahoori et al., "Monitoring the economic transition in the Russian Federation and its implications for the demographic crisis – the Russian Longitudinal Monitoring Survey", *World Development*, Vol. 26, No. 11 (Oxford), 1998.

[255] B. Milanovic and B. Jovanovic, "Change in the perception of the poverty line during the times of depression: Russia 1993-1996", World Bank (Washington, D.C.), 1999, mimeo.

[256] A. Ferrer-i-Carbonell and B. van Praag, "Poverty in the Russian Federation", Faculty of Economics, Amsterdam University (Amsterdam), 2000, mimeo.

[257] N. Rimashevskaya and E. Yakovleva (eds.), *Rossiya 1997* (Moscow, Institute for Socio-Economic Problems of the Population, Russian Academy of Sciences, 1998), pp. 188-193.

[258] UNDP, *Human Development Report for Central and Eastern Europe and the CIS 1999* (United Nations publication, Sales No. E.99.III.B.6), p. 23.

[259] N. Kakwani, "Income inequality, welfare and poverty in Ukraine", *Development and Change*, Vol. 27, No. 4 (The Hague), October 1996, p. 688.

(ii) Decline in employment

The transformation recession led to a sharp fall in formal sector employment throughout the region. Officially registered employment in the central and east European countries (excluding the former German Democratic Republic (GDR)) fell from about 193 million in 1989 to less than 170 million in 1996, i.e. by about 12 per cent.[260] The fall was most pronounced in central Europe, south-east Europe and the Baltic countries, where on average it was about 16 per cent, and least pronounced in the CIS countries, where it was only about 11 per cent. Some data on the decline in formal sector employment are set out in table 5.2.2.

Table 5.2.2 shows the general fall in formal sector employment, the particularly sharp falls in some countries, e.g. Hungary and Latvia, which lost more than a quarter of their formal employment during the first few years of transformation, and also the recovery which has taken place in some countries in recent years. For example, in Poland formal sector employment rose more than 10 per cent in 1993-1998.

The fall in formal sector employment has had important – usually negative – consequences for the people concerned. It has frequently led to a decline in individual and family income, social exclusion, and a worsening of the life chances of their children. Those ejected from the formal sector currently work abroad (as temporary or permanent – and often illegal – *gastarbeiters*), in the household or informal sectors,[261] have retired, or have become unemployed.

The decline in employment has disproportionately affected women. In general, the decline in female employment has been larger – in some cases very much larger – than the decline in male employment.[262] For example, in the Czech Republic, between 1985 and 1997, the decline in female employment (11.8 per cent) was almost 10 times the decline in male employment (1.2 per cent). Although the decline in employment has hit women more than men, it is not normally the case that the unemployed are mainly women. Women who lose their jobs are much more likely than men to leave the labour force altogether.

Important features of the CIS employment scene have been wage arrears, payment in kind, administrative leave, involuntary short-time work, and extended maternity leave. Hence much of the "employment" officially registered in those countries has not been accompanied by the regular payment of wages in money and in full. This has generated much hardship and discontent among those affected. Hence, Standing and Zsoldos have referred to Ukrainian workers in 1995 as being victims of "excessive wage flexibility".[263]

(iii) Growth of unemployment

Although some unemployment existed under the old regime (people between jobs, political undesirables, women in coal mining regions) it was quantitatively small and socially insignificant. During the transformation it has grown greatly. Some data on (registered) unemployment in the region are set out in table 5.2.3.

While everywhere higher than under the old system, unemployment has shown sharp national variations. In Poland, after growing quickly in the early 1990s and reaching a very high level, it declined significantly in response to substantial economic growth. From a peak of 17 per cent in July 1994, registered unemployment had fallen to 9.5 per cent by August 1998, although it subsequently increased again. On the other hand, in the Czech Republic, where it was initially low, it grew significantly in the late 1990s and is expected to exceed 10 per cent in 2000. When attention is directed not at registered unemployment but at labour force survey unemployment, then Latvia and Lithuania appear to have high unemployment rates (in both cases about 14 per cent in the second quarter of 1998). The highest levels of unemployment appear to be in south-east Europe.[264] In April 1999 the labour force survey unemployment in The former Yugoslav Republic of Macedonia was 34.5 per cent! In Russia officially estimated labour force survey unemployment grew significantly in the 1990s, and reached 14.2 per cent in the spring of 1999. It subsequently declined, under the influence of the economic recovery, falling to about 12 per cent at the end of 1999. The large difference between registered unemployment, and actual or estimated labour force survey unemployment, in the CIS countries, reflects the low level of unemployment benefit in those countries, its erratic payment, the bureaucratic obstacles which exist for those who wish to register as unemployed, and the lack of trust in state institutions by people in those countries.

Contrary to the initial view of most western economists, unemployment has not played a positive role in restructuring. New private firms tend to recruit directly from those employed in the state sector. From the point of view of the national economy, unemployment simply comprises a fiscal burden and

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[260] UN/ECE, *Economic Bulletin for Europe*, Vol. 49 (United Nations publication, Sales No. E.97.II.E.23), 1997, p. 24.

[261] For analyses of the role of the informal sector see S. Johnson et al., "The unofficial economy in transition", *Brookings Papers on Economic Activity* (Washington, D.C.), Fall 1997; E. Sik, "From the multicolored to the black and white economy: the Hungarian second economy and the transformation", *International Journal of Urban and Regional Research*, Vol. 18 (London), 1994.

[262] UN/ECE, *Economic Survey of Europe, 1999 No. 1*, p. 136.

[263] G. Standing and L. Zsoldos, *Labour Market in Ukrainian Industry: The 1995 ULFS* (Geneva, ILO, 1995), p. 55.

[264] UN/ECE, *Economic Survey of Europe, 1999 No. 2*, p. 8.

TABLE 5.2.2

Total formal sector employment in the transition economies, 1990-1999
(1989=100)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Albania	99.2	97.5	76.0	72.7	80.7	79.0	77.5	76.9	75.3	..
Belarus	99.1	96.6	94.1	92.9	90.4	84.8	84.0	84.1	85.0	86.0
Bulgaria	93.9	81.6	75.0	73.8	74.3	75.2	75.3	72.3	72.2	..
Czech Republic	99.1	93.6	91.2	89.7	90.4	92.8	93.4	91.6	90.2	..
Estonia	98.6	96.4	91.4	84.5	82.7	78.3	77.0	77.4	76.4	..
Hungary	96.7	86.7	78.1	73.2	71.8	70.4	69.8	69.8	70.7	72.9
Latvia	100.1	99.3	92.0	85.6	77.0	74.3	72.3	73.7	74.1	..
Lithuania	97.3	99.7	97.5	93.4	88.0	86.4	87.2	87.7	87.0	..
Republic of Moldova[a]	99.1	99.0	98.0	80.7	80.4	80.0	79.4	78.7	78.5	76.5
Poland	95.8	90.1	86.3	84.3	85.1	86.7	88.3	90.8	92.9	..
Romania	99.0	98.5	95.5	91.9	91.5	86.7	85.7	82.4	80.5	..
Russian Federation	99.6	97.7	95.3	93.7	90.6	87.9	87.2	85.5	84.2	85.3
Slovenia	96.1	88.7	83.8	81.3	79.3	79.1	78.7	78.6	78.7	80.2
Ukraine	99.9	98.3	96.3	94.1	90.5	93.3	91.3	88.8	87.9	86.5

Source: UN/ECE, *Economic Survey of Europe, 2000 No.1*, p. 228.

[a] Since 1993 excludes Transdniestria.

does not provide resources for the growth of dynamic enterprises.[265] Its only positive role is to improve the financial position of the enterprises doing the sacking (assuming they evade severance costs).

(iv) Increased inequality

During the transition inequality has substantially increased. The measurement of income distribution raises conceptual, methodological and practical issues of a complex nature. Hence all published income distribution data raise questions as to their coverage (part or all of the population), income concept (before or after tax, treatment of housing, treatment of informal sector earnings), unit of observation (individuals, adult equivalents, households), time period (weekly, monthly, annual, five year), source (tax data, complete enumeration, surveys – if so whose and how done) and measure of inequality used. As in the case of poverty, it is convenient to use the data presented by the World Bank's income distribution specialist Milanovic, and some of this is set out in table 5.2.4.

According to the data in table 5.2.4, during the transformation inequality increased in all countries of the region except Slovakia. In general, the resulting income distribution in central Europe was still quite equal by OECD standards (particularly in Slovakia and Hungary and possibly in the Czech Republic), but in Russia and Ukraine the distribution of (non-housing) income in the mid-1990s seems to have been about as unequal as in Latin America. The big increase in inequality in Russia is an important part of the explanation of how it was possible that there was a large growth in consumer durable ownership in that country despite the decline in average real incomes.

There does not appear to be any reliable, internationally comparable data on the distribution of wealth in the transformation countries. It seems likely that, as is normal throughout the world, the inequality of wealth is greater than that of income. There is some research which suggests that in Russia the privatization of housing had an equalizing effect, since the distribution of the imputed income from the newly owner-occupied housing was much less unequal than the distribution of money incomes.[266]

(v) Deterioration of public services and polarization of their provision

During the transformation, many public social provisions have deteriorated or ceased to be public facilities. For example, there has been neglect of the maintenance of school buildings in many countries. In some countries, such as Bulgaria, the Republic of Moldova and The former Yugoslav Republic of Macedonia, the heating of schools in winter has become a serious problem. In many countries the provision of school meals has significantly declined. This is the case in Russia, Belarus, Slovakia and Bulgaria. On the other hand, in Hungary between 1989 and 1996 the provision of school meals remained roughly constant.[267] Van Zon et al. have described the sad situation in Zaporizhzhya

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[265] R. Jackman, "Unemployment and restructuring", in P. Boone, S. Gomulka and R. Layard (eds.), *Emerging from Communism* (Cambridge, MA, MIT Press, 1998); S. Clarke, *New Forms of Employment and Household Survival Strategies in Russia* (Coventry, ISITO/CCLS, 1999).

[266] J. Fleming and J. Micklewright, *Income Distribution, Economic Systems and Transition*, UNICEF, Innocenti Occasional Papers, Economics and Social Policy Series, No. 70 (Florence), p. 72.

[267] Under the conditions which currently exist in some CIS countries and Bulgaria, the provision of free school meals may also have a non-nutritional benefit. It may have a positive effect on school enrolment and attendance.

TABLE 5.2.3

Registered unemployment in selected transition economies,[a] 1990-1999
(Per cent, end of year)

	1990	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Albania	9.5	18.0	12.9	12.3	14.9	17.6	..
Bulgaria	1.8	12.8	11.1	12.5	13.7	12.2	16.0
Czech Republic	0.7	3.2	2.9	3.5	5.2	7.5	9.4
Hungary	1.7	10.9	10.4	10.5	10.4[b]	9.1	9.6
Poland	6.5	16.0	14.9	13.2	10.3	10.4	13.0
Romania	1.3	10.9	9.5	6.6	8.8	10.3	11.5
Russian Federation	..	7.5	8.9	10.0	11.2	13.3	12.3

Source: UN/ECE, *Economic Survey of Europe, 2000 No.1*, p. 230.

[a] Registered unemployment for all countries except Russia. For Russia, Goskomstat estimates of unemployment according to ILO definition.

[b] The labour force survey estimated the rate at 8.7 per cent.

province, eastern Ukraine.[268] After considering the situation of medical care, education, musicians and the cinema, pensioners, the disabled, orphans, sport, public housing, public transport, garbage collection, and pre-school child care, they concluded that "the extended public services network that developed in Soviet times and used to be very cheap or free of charge, has collapsed. This has especially affected the poor, that is, the majority of the population."

The need to overcome the widespread environmental degradation inherited from the previous system was widely stressed at the beginning of the transformation. The structural shift in the economies from industry to services, and the depression, by reducing industrial production had the effect of reducing industrial pollution. Nevertheless, in Russia water pollution seems to have worsened in recent years.[269] According to the same report[270] there has been a general environmental deterioration in Russia in the recent past. One of the reasons for this is the growth in the number of motor vehicles.

The costs of education for children and their parents (both direct costs such as textbooks and shoes, and opportunity costs such as the cut in family income resulting from loss of work done on the family farm), migration,[271] the decline in the quality of education (in some countries), and the decline in public administration, have led to a fall in the proportion of certain age groups attending schools (see table 5.2.5).

TABLE 5.2.4

Inequality during the transition in selected transition economies, 1987-1995
(Gini coefficient,[a] annual)

	Income[b] per capita		*Expenditure per capita*
	1987-1988	*1993-1995*	*1993-1995*
Central Europe			
Czech Republic	19	27[c]	..
Hungary	21	23	27
Poland	26	28	31
Slovakia	20	19	..
Slovenia	22	25	..
Balkans			
Bulgaria	23	34	..
Romania	23	29	33
Baltic states			
Estonia	23	35	31
Latvia	23	31	..
Lithuania	23	37	..
CIS			
Belarus	23	28	30
Republic of Moldova	24	36[d]	..
Russian Federation	24[e]	48[f]	50
Ukraine	23	47	44

Source: B. Milanovic, *Income, Inequality and Poverty During the Transition From Planned to Market Economy* (Washington, D.C., World Bank, 1998), p. 41.

[a] The Gini coefficient varies between 0 and 100, the higher the value the more unequal the distribution. For comparison, in 1995 the Gini for Denmark and Sweden was between 21 and 23; for the United Kingdom and the United States 34-36; and for Latin America about 50.

[b] No account is taken of housing income (implicit housing subsidies and imputed income of owner occupiers). In Russia in 1992, including housing income reduces the Gini coefficient from 41.7 (money income only) to 35.4. R. Buckley and E. Gurenko, "Housing and income distribution in Russia: Zhivago's legacy", *The World Bank Research Observer*, Vol. 12, No. 1 (Washington, D.C.), February 1997. It is likely that the situation in the other CIS countries was similar.

[c] This is for monthly income, whereas all the other data are for annual income. This probably creates an upward bias. T. Garner and K. Terrell in "A Gini decomposition analysis of inequality in the Czech and Slovak republics during the transition", *Economics of Transition 1998*, No. 1 (Edinburgh), argue that this increase in inequality in the Czech Republic is an illusion. Using household rather than per capita income data and comparing 1989 and 1993, they suggest that there were similar, small increases in the Gini coefficient in the Czech Republic and Slovakia.

[d] According to UNDP, *Human Development Report for Central and Eastern Europe and the CIS 1999* (United Nations publication, Sales No. E.99.III.B.6), p. 7, the Gini coefficient in Armenia in 1996 was 60, and "a similarly high level has been reached in Moldova." These are extremely high levels, and the comparability of UNDP and World Bank data is uncertain.

[e] It is possible that inequality in Russia in 1987-1988 is grossly understated by this figure. According to C. Morrison, "Income distribution in east Europe and western countries", *Journal of Comparative Economics*, Vol. 8, No. 2 (Orlando, FL), 1984, when account is taken of the income in kind of the *nomenclatura*, the Gini coefficient in the USSR in 1973 was 31. Naturally, the higher the Gini coefficient under the old regime, the smaller the increase associated with the transformation.

[f] According to the official Russian statistics, the Gini coefficient reached a peak of 41 in 1994, and then declined to 38 in 1998. These data are derived from the imperfect family budget survey and are generally thought to be less reliable than the Russian Longitudinal Monitoring Survey (RLMS), which is the basis for the Milanovic estimates. The RLMS estimate for the Gini coefficient for 1996 is 49. T. Mroz and B. Popkin, *Monitoring Economic Conditions in the Russian Federation: The Russian Longitudinal Monitoring Survey, 1992-96* (Chapel Hill, NC, University of North Carolina, 1997).

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[268] H. van Zon et al., *Social and Economic Change in Eastern Ukraine: The Example of Zaporizhzhya* (Aldershot, Ashgate, 1998), chap. 7.

[269] "Gosudarstvennyi doklad o sostoyanii zdorov'ya naseleniya rossiiskoi federatsii v 1997 g", *Zdravookhranenie rossiiskoi federatsii, 1999*, No. 1 (Moscow), pp. 11-14.

[270] Ibid., p. 13.

[271] In Russia the population registration system can prevent the children of mobile workers receiving education. For example, people who move to Moscow without official registration there, may find their children are excluded from Moscow schools.

TABLE 5.2.5

Basic education enrolments in selected transition economies, 1989, 1996 and 1997

(Gross enrolment rates,[a] as a percentage of the 6/7 to 14/15 age group)

	1989	1996	1997
Albania [b]	90.8	87.6[c]	..
Bulgaria	98.4	93.6	94.0
Estonia [d]	96.2	92.8	93.7
Latvia	95.8	90.3	90.7
Russian Federation [d e]	93.0	91.4	90.8
Ukraine [e]	92.8	91.2	90.7

Source: UNICEF, *Education for All?* (Florence), 1998, pp. 20-21 and 111 and *Women in Transition* (Florence), 1999, p. 133. Where the UNICEF reports give conflicting data, the data given in the most recent report has been used.

[a] These are the total number of children enrolled, divided by the number of children in the age group. Hence, an increase in the number of children repeating the year "improves" the statistics. Furthermore, inaccurate estimates of the number of children in the relevant age cohort will distort them. In addition, the figures are for enrolment at the beginning of the school year, not for attendance. The accuracy of the figures for Russia and Ukraine, especially for 1989, is uncertain. UNICEF gives quite different figures for Russian secondary enrolments in UNICEF, *Children at Risk in Central and Eastern Europe: Perils and Promises* (Florence), 1997, p. 159 and *Poverty, Children and Policy: Responses for a Brighter Future* (Florence), 1995, p. 147.

[b] Six to 13 years

[c] 1994.

[d] Seven to 15 years.

[e] In Russia in early 1998 about 12.5 per cent of school age children seem not to have been attending school. The reasons for this include selection and expulsion. S. Webber, *School, Reform and Society in the New Russia* (Basingstoke, Macmillan, 2000), p. 187.

The situation shown in table 5.2.5 – if the data are accurate – is alarming. In some countries the proportion of children receiving education has fallen significantly during the transformation period. Currently, in a number of countries, about 1 in 10 children are being deprived of schooling. A sensible and successful policy initiative to deal with the drop-out problem was undertaken in Romania in 1993.[272] This was to tie the payment of family allowances to school enrolment. As a result, educational enrolments in Romania, which had fallen from 93.6 per cent in 1989 – a figure below that of three of the countries in table 5.2.5 – to only 89.6 per cent in 1992, subsequently increased and by 1997 had reached 95 per cent – higher than that of all the countries in table 5.2.5.

Educational inequality has, in many cases, increased both in provision and achievement. For example in Hungary there has been an increase in the disparity in learning achievements between children in the main cities and in the villages.[273] In Russia too, educational inequalities have increased. According to a recent study,[274] "Under the banner of 'increasing choice', all these concerns point paradoxically to diminishing educational opportunities for many children, especially those who are rural, less affluent, or less well-connected – regardless of their individual merit.... As Russian society becomes increasingly stratified in terms of wealth, Russian education is increasingly stratified in terms of opportunity."

Another example of educational inequality, concerns ethnic minorities. One such case is the situation of Roma children. A 1992 study showed that in Romania only 51 per cent of 10-year old Roma children regularly attended school, 14 per cent had stopped school, 16 per cent went to school occasionally and 19 per cent had never been to school.[275]

(vi) Spread of disease

In the early 1990s there was a significant worsening of the morbidity situation in the CIS countries. In Russia, there was a diphtheria epidemic (which was brought under control),[276] and tuberculosis, syphilis and hepatitis grew substantially (although syphilis declined in the late 1990s). The danger of a further spread of tuberculosis generated international attention and international assistance programmes. On the other hand, in Russia polio was virtually eliminated by the end of the 1990s. Alarming warnings were uttered at the end of the decade about the prospects of the rapid growth in the number of HIV infected people leading to a large absolute number of AIDS victims in Russia at the beginning of the twenty-first century. In the CIS, the combination of state collapse, kleptocracy, fiscal crisis and declining living standards created a fertile environment for the spread of disease. For example, despite the risk of a future AIDS epidemic, in 1997 the Russian state was unable to finance the official programme for preventing the spread of HIV infection.[277] Similarly, the decline in the health of pregnant women in Russia in the 1990s seems partly to have been a result of the decline in their nutrition resulting from falling living standards.[278] The decline in living standards has also had other adverse effects on health.[279] According to two officials of the Russian epidemiological service (*gossanepidnadzor*): "in recent years the state of the population's health has been characterized by negative tendencies. There has been an increase in the number of diseases, including those of the digestive system (*alimentar'nye bolezni*). For example, in recent years morbidity and mortality have increased from cardiovascular diseases and cancers, there is a serious problem of inadequate vitamins and micronutrients, and the anthropometric indicators [i.e. height and weight] of children and adolescents have worsened.[280] Poor families do not receive an adequate diet. The result of this is the growth of anaemia, and stomach and duodenal ulcers, among both children and adults. The most alarming aspect is the increase in the number of children suffering from digestive illnesses."[281]

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[272] UNICEF, *Poverty, Children and Policy: Responses for a Brighter Future* (Florence), 1995, p. 73.

[273] UNICEF, *Education for All?* (Florence), 1998, pp. 45-46.

[274] OECD, *Russian Federation,* Reviews of National Policies for Education (Paris), 1998, pp. 79-82.

[275] UNDP, op. cit., p. 57.

[276] This was a result of the decline in immunizations in 1990-1991. This in turn resulted from media scare stories about the possible adverse consequences of immunization. Subsequently the immunization coverage increased, and by 1995 the percentage of Russian children under two immunized against DPT was about 93 per cent.

[277] "Gosudarstvennyi doklad o sostoyanii zdorov'ya naseleneiya rossiiskoi federatsii v 1997 g", *Zdravookhranenie rossiiskoi federatsii, 1999,* No. 1 (Moscow), p. 16.

[278] Ibid., No. 2, pp. 15-18.

[279] Alarming reports have been published in Russia about the declining health of young men called up for military service. For example, in the period 1990-1995 their fitness is said to have declined by 32 per cent. Similarly, "in the last three years" [1995-1997] the number of conscripts exempted from military service for medical reasons rose by 10 per cent. See E. Breeva, *Deti v sovremennom obshchestve* (Moscow, Editorial URSS, 1999), pp. 49-50. The difficulty with assessing this kind of data is that it is not clear to what extent it results from a change in the

About 15-20 per cent of Russian couples suffer from infertility. There is a high level of gynaecological ailments among teenage girls in Russia. "In the last five years [1994-1998] the frequency of some gynaecological diseases among teenage girls (in Russia) has increased 3-5 times."[282]

In Ukraine too there have been syphilis and HIV/AIDS explosions, a diphtheria epidemic in the early 1990s, a substantial growth in tuberculosis cases and deaths, and as in Russia there is a high infertility rate.

During the 1990s there appear to have been, in a number of countries, increases in alcoholism, smoking and the consumption of narcotics. For example, in Russia between 1987 and 1999 the proportion of men in the age range 30-39 who were smokers increased from 51 per cent to 71 per cent.[283] Similarly, in Russia in 1990-1997 the number of 15-17 year olds registered at medical institutions as narcotics users rose 12-fold.[284]

It is possible to combine morbidity and mortality indicators into a synthetic index to measure the health of the population of this or that country. Although the results of such comparisons are partly dependent on the inevitably somewhat arbitrary choice of indicators, nevertheless the exercise can be illuminating. According to such an index constructed by Healthcare Europe for the last quarter of 1998,[285] three transformation countries, Slovenia, Slovakia and the Czech Republic, had health levels better than the lowest EU country, and Poland had a score only just worse than the lowest EU country. The three European countries with the worst results were Romania, Estonia and Russia. This illustrates that, whereas some transformation countries have already returned to Europe and the health of their populations is already at EU levels, some countries in south-east Europe and the CIS lag a long way behind the EU.

(vii) Decline in fertility

There has been a sharp decline in fertility, as measured by the crude birth rate, the total fertility rate or the net reproduction rate.[286] This decline shows a wide dispersion. It is greatest in the former GDR and smallest in Hungary. The causes of this decline have been much discussed and may differ significantly between countries.[287] It cannot simply be caused by the decline in average incomes, since it was greatest in the former GDR where incomes did not decline. On the other hand, Vandycke showed that when Russian regions are looked at in cross-section, the rustbelt (the regions with the greatest fall in industrial production and the highest unemployment) had the greatest fall in fertility. This suggests that economic factors (income loss and uncertainty increase) did play an important role in

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fitness of the young men and to what extent it results from a change in the willingness of the relevant authorities to sell exemption from military service. Military service is not universally popular, is not marked by high living standards, is dangerous and is unpaid. On the other hand, the information about a big increase in syphilis and alcoholism among potential conscripts (ibid.) is unfortunately only too plausible.

[280] For an introduction to the analysis of anthropometric indicators as measures of welfare in Russia/USSR, see "Discussion", *Slavic Review*, Vol. 58, No. 1 (Cambridge, MA), Spring 1999.

[281] V. Chiburaev and A. Ivanov, "Problemy organizatsii pitaniya naseleniya Rossii", *ZNISO*, No. 11 (Moscow), 1999.

[282] "O nekotorykh mediko-demograficheskikh i sotsial'nykh aspektakh razvitiya podrostkov", *Statisticheskoe obozrenie 1999*, No. 3 (Moscow), p. 73.

[283] "O probleme tabakokureniya v Rossii", *ZNISO*, No. 12 (Moscow), 1999, p. 21.

[284] "O nekotorykh mediko-demograficheskikh..., op. cit., p. 72.

[285] *Economist* (London), 12 December 1998.

[286] The *crude birth rate* is the number of births per 1,000 of the population. It is easy to calculate and is normally available almost contemporaneously with the processes of natality change. However, it is influenced not only by the number of births but also by the age and gender composition of the population. For example, an increase in the expectation of life at age 60 will reduce the crude birth rate although it will not affect the extent to which generations are replacing themselves. The *total fertility rate* attempts to overcome this weakness. It shows the total number of children a woman would have if she gave birth according to the age specific fertility rates of a given year. The extent to which a population is reproducing itself, however, is determined not only by total births but also by the gender ratio at birth and female mortality prior to completing childbearing. A measure of fertility which takes account of the first of these factors is the *gross reproduction rate*. This is the total fertility rate for daughters only. A measure which also takes account of the latter is the *net reproduction rate*. This is an adjustment of the gross reproduction rate by mortality prior to the end of the childbearing age. These measures are all period measures, which do not take account of the reproductive history of the units measured. If the timing of births fluctuates, however, these measures will not necessarily accurately reflect the extent to which generations are replacing themselves. For example, if teenage births fall this will reduce the total fertility rate for the period concerned, but does not necessarily mean that the women concerned will have fewer children than their mothers – they might simply have the same total number but at older ages. A measure of fertility which takes account of this is *completed cohort fertility*, which measures the total number of children a group of women (for example all those born in a particular year(s)) in fact had. This is a more accurate measure of actual fertility than the total fertility rate, but it is only available after the end of a generation's reproductive life and hence is not suitable for analysis of many current issues. Furthermore, a non-stationary population's rate of change per unit of time is influenced not only by the extent to which each generation replaces itself, but also by the time between generations, which varies.

[287] UN/ECE, *Economic Survey of Europe, 1999 No. 1*, chap. 4; N. Vandycke, "The economics of the reproduction 'crisis' in transition Europe", London School of Economics (London), 1999, unpublished PhD thesis.

determining the fertility decline. It also suggests that the fertility decline was a welfare loss, a decision forced on people by worsening economic circumstances.

It should be noted, however, that when the timing of births changes, the total fertility rate can differ from the cohort fertility rate and give a misleading impression of the extent to which generations are replacing themselves. For example, in Hungary the completed cohort fertility rate for women at the end of their childbearing age rose between the late 1980s and the mid-1990s despite the fact that the total fertility rate fell in that period.[288] Conversely, in Russia the completed cohort fertility rate has been below the population replacement rate for all cohorts born since the late 1930s. The distinguished Russian demographer Vishnevskii has implied that this means that the failure of the population in the 1990s to reproduce itself cannot be a result of a change in reproductive decisions under the influence of the transformation.[289] The fact that the Russian population nevertheless increased in the 1970s and 1980s seems to have been a result of the age composition of the population. There was an abnormally low level of elderly people, especially males, in the population in those decades as a result of a series of earlier demographic catastrophes, notably the Second World War.[290] This produced a relatively low crude death rate, as the groups with the highest mortality rates (the elderly) constituted a relatively small share of the total population. Another age-specific factor was a relatively high share of women of childbearing ages, which increased the crude birth rate relative to the total fertility rate.

Moreover, part of the decline in the crude birth rate and the total fertility rate can be considered a normal process of convergence towards the low fertility norm in the EU. This seems to have been a significant factor in the Czech Republic, Hungary and Slovenia, where the mean age of childbearing increased in line with European trends. It would be strange to interpret the fall in fertility in northern Italy, one of the most prosperous areas in the world, as a welfare loss resulting from impoverishment and increased uncertainty.[291] On the other hand, the decline in the mean age of childbearing in the CIS countries suggests that the decline in fertility there is not a normal process of Europeanization but is largely caused by the general transformation crisis in those countries.[292] Similarly, the high level of infertility among Russian and Ukrainian couples, and the growth of gynaecological diseases among teenage girls in Russia, are obviously not a result of Europeanization but of welfare decline.

(viii) Increase in mortality

There have been significant changes in mortality. These vary from a very big increase in Russia to declines in the former GDR (except among adult males), Slovakia, the Czech Republic, Slovenia, Poland and Hungary. The increase in mortality is concentrated in the European part of the former Soviet Union[293] and among men of working age. Its causes have been much discussed. Some have related it directly to changes in the economic situation. Others have stressed the role of changes in alcohol consumption.[294] A Russian sociologist has even described the situation in Russia in the late 1990s as "the alcoholization of the population".[295] However, one can ask whether changes in alcohol consumption are a proximate cause or an ultimate cause. The increase in alcohol consumption resulted from a decline in its relative price and its greater accessibility. Both were a result of a sequence of events, beginning with Gorbachev's anti-alcohol campaign of 1985-1986 and the resulting rise of the samogon sector, followed by the abandonment of Gorbachev's anti-alcohol campaign in 1987-1988, followed by a deterioration in the effectiveness of the Soviet state in 1989-1991, and by its collapse at the end of 1991, and the abolition of the state alcohol monopoly in Russia at the end of 1991. This last measure partly resulted from the assumption of office by neo-liberal ministers who regarded the state monopoly of alcohol as analogous to the state monopoly of foreign trade – something which had no place in a liberal society. Partly it was a populist gesture by a new government prepared to sacrifice essential tax income and public health to attain some popularity with the male population. In this sense, even though an important proximate cause of the increase in mortality may have been the increase in alcohol consumption, the ultimate cause was a range of factors, of which state collapse was very important, but where the policies of the neo-liberal ministers who took office in the autumn of 1991 were also a factor.

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[288] UN/ECE and UNPF, *Fertility and Family Surveys in Countries of the ECE Region: Hungary* (United Nations publication, Sales No. E.99.II.E.6), p. 13.

[289] D. Lvov (ed.), *Put' v XXI vek* (Moscow, Ekonomika, 1999), p. 283. This argument obscures the difference between a moderately low *level* of fertility and a sharp *decline* in fertility to very low levels. The Russian net reproduction rate was below 1 (i.e. the population was failing to reproduce itself) throughout the period 1964-1965 to 1985-1986, but throughout that period it was not much below 1 (the range was 0.874-0.995 and the average was 0.937) and there was no trend. In 1988-1998 the net reproduction rate fell fairly continuously and very sharply, from 1.005 to 0.585, a decline of 42 per cent in only 10 years. Similarly, in the same period the total fertility rate also fell by 42 per cent, from 2.130 (approximately characteristic of a stable population) to 1.242 (which if it persists will lead to a sharp population decline).

[290] Ibid., p. 287.

[291] It should be noted that it is erroneous to draw a direct link between neoliberal economic policies and the sharp fall in fertility. Although it is plausible that at least part of the decline in fertility is a reaction to the crisis, it is implausible to identify the crisis, as perceived by young people, just with neoliberal economic policies. For example, in Russia the break in the fertility series appears to have been in 1989, which was two years before the neoliberal ministers took office but at a time when the socio-political situation in the Soviet Union was already widely perceived by its population to be one of crisis.

[292] UN/ECE, *Economic Survey of Europe, 1999 No. 1*, pp. 193-194. The data in this source only goes up to 1995. In 1996-1998 the mean age of childbearing in Russia increased slightly, but even in 1998 was still below that for the entire period 1960-1991 (except 1978-1981).

[293] "The European part of the former Soviet Union" refers to the European part of the former Soviet Union plus the Asian parts of Russia. It excludes central Asia and the Transcaucasus.

[294] V. Shkolnikov and A. Nemtsov, "The anti-alcohol campaign and variations in Russian mortality", in J. Bobadilla et al. (eds.), *Premature Death in the New Independent States* (Washington, D.C., National Academy Press, 1997); D. Leon et al., "Huge variations in Russian mortality rates, 1984-1994: artifact, alcohol or what?", *The Lancet*, No. 350 (London), 1997.

[295] N. Rimashevskaya (ed.), *Rossiya 1998* (Moscow, Institute for Socio-Economic Problems of the Population, Russian Academy of Sciences, 1999), p. 66.

Other writers have emphasized the importance of stress.[296] Here also one can distinguish between proximate and ultimate causes. Individuals suffered stress because of the collapse of their familiar social worlds and the difficulty of coping with changed circumstances under conditions of reduced incomes. If the proximate cause of increased mortality under these circumstances is stress, the ultimate cause is the process of state collapse followed by state failure (to provide economic stability), which generated the stress experienced by individuals. The increase in Russian mortality in 1999, which followed the economic crisis of 1998 and led to increased inflation, declining real incomes, increased unemployment, bank failures and a period of general disorientation, may be interpreted as supporting the stress hypothesis. This will be particularly the case if Russian mortality falls in 2000, following the socio-economic recovery of 1999-2000.[297]

Russian mortality, after reaching a very high level in 1994, declined significantly in 1995-1998 but then increased again in 1999 (and the first half of 2000). In Kazakhstan there was a similar, but not identical, pattern. Male life expectancy at birth fell by five and a half years in 1989-1995, reaching a low of 58.4 in 1995 (just above that for Russia in 1994) but recovered only slowly. In 1997 it was 1.9 years below the Russian level. The similarity of developments in Russia and Kazakhstan, where local neo-liberals had little influence, suggests that the main ultimate factor in both countries was state collapse and state failure.

It is not yet possible to provide a complete analysis of the Russian mortality increase, on which further work is being undertaken by various research groups using a variety of data sets. In addition, it is unfortunately not yet possible to view it as a completed historical process, as shown by the 1999 (and first half of 2000) mortality increase. One policy-relevant conclusion is, however, already very clear. It is that effective control over alcohol consumption could play a very important role in mortality reduction. This should avoid the mistakes of 1985-1987 and learn from the experience of countries with effective alcohol control policies.

The high *level* of mortality in some CIS countries, notably Russia and Kazakhstan, is a major socio-economic problem for those countries. It mainly hits adult males and hence has serious economic costs. A detailed analysis of the Russian situation, with suggestions for measures to improve it, has been made by the Russian demographers Vishnevskii and Shkolnikov.[298] They also point out that the divergence between the Russian and western mortality experience goes back to the mid-1960s. At that time, life expectancy at birth in Russia had almost caught up with the western level, but thereafter the difference significantly increased. The 1988-1994 deterioration was a sharp downward fluctuation in an adverse trend, which had originated more than 20 years earlier.

(ix) Depopulation

A major result of these demographic processes is that the region as a whole, and its most populous country in particular, appear to have become an area/country of population decline. According to official statistics, in the eight years 1992-1999 the population of the Russian Federation fell by 2.8 million or almost 2 per cent, and in 1999 alone by 785,000, or 0.5 per cent. Further (officially measured) depopulation seems likely.[299] On present trends, the (officially registered) population of Russia will fall below 145 million during 2000. Throughout the region many people worry about the decline in numbers of their ethnic group or of the population of their state. If one takes the fertility and mortality rates as given, and treats as reliable the official migration data, this depopulation is a result of insufficient immigration. In 1999 not only numerous transformation countries, but also EU countries such as Germany, Italy and Sweden had an excess of deaths over births. These three EU countries, however, unlike the transformation countries, had a growth in their population because their net immigration was greater than their excess of deaths over births. Although some people have advocated that the transformation countries should encourage immigration to offset their depopulation (for example, Zayonchkovskaya has argued that Russia should encourage Chinese immigrants in western Russia)[300] this is a controversial and unpopular position throughout the region.

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[296] J. Shapiro, "The Russian mortality crisis and its causes", in A. Aslund (ed.), *Russian Economic Reform at Risk* (London and New York, Pinter, 1995); V. Shkolnikov et al., "Causes of the Russian mortality crisis: evidence and interpretations", *World Development*, Vol. 26, No. 11 (Oxford), November 1998.

[297] However, in the first half of 2000, it rose rather than falling. This (together with the causes of the mortality increase as published in the cause of death statistics) suggests that alcoholism was more important than stress.

[298] A. Vishnevskii and V. Shkolnikov, *Smertnost' v rossii: glavnye gruppy riska i prioriteity deistviya* (Moscow, Carnegie Center, 1997).

[299] The accuracy of the population registration statistics – from which the official population figures are derived – is uncertain. According to President Putin, in his open letter to the electors of 25 February (*Izvestiya*, 25 February 2000), there are currently no reliable figures about the population and a census is necessary to count the population (the last full census was held in 1989). This scepticism probably relates mainly to the migration data, which are known to be unreliable. There is both unregistered emigration and unregistered immigration. It seems likely that on balance there is net unregistered immigration. If the gross number of illegal immigrants in Russia in the late 1980s really was about 4 million, or about 3 per cent of the population, as estimated in N. Rimashevskaya, op. cit., p. 95, then it might be that depopulation in Russia in the 1990s was a statistical illusion created by inadequate data on immigration.

[300] Z. Zayonchkovskaya, "Chinese demographic expansion into Russia: myth or inevitability", in G. Demko et al. (eds.), *Population Under Duress* (Boulder, CO, Westview, 1999).

This process of (officially measured) depopulation is sometimes described with the help of an extremely alarmist terminology. For example, S. Glazyev, the well-known Russian economist and Duma member, and a Minister in the 1992 Gaidar government, has described it as "genocide".[301] Referring to the fertility data for 1996 he has stated that "Such a low level of reproduction is unprecedented, and has not been observed before now, neither in our country, nor in others, even during wartime." This untrue statement entirely ignores the similar fertility levels in Italy and Germany, and the fact that Russian fertility in 1996 was about double that in the former GDR.

Depopulation is normally treated as a negative economic development, and it certainly has negative aspects. However, it may have favourable effects on real wages as workers become scarcer, as seems to have happened in mediaeval Europe in response to the mortality crisis resulting from the Black Death. In Russia the population of working age will decline significantly from the middle of this decade,[302] which will be adverse for employers but may be favourable for employees.

(x) Criminalization

One of the striking features of the transformation was the growth of crime and the widespread criminalization of society, particularly in the CIS countries. This has been extensively described[303] and also analysed by economists.[304] Apartment dwellers have reacted by fortifying their apartments. Entrepreneurs have reacted by buying "protection" and sending their families abroad. Many people, especially women and the elderly, are more fearful in public places than comparable people would have been 15 years ago. In the CIS countries, criminalization has contributed to capital flight. An important feature of events in the CIS countries in the 1990s was the development of close links between the criminal, political and business worlds. Membership in the national parliaments was frequently coveted primarily for the immunity from criminal prosecution that it provided. Business people employed criminals for contract enforcement. It is characteristic of the situation that when in December 1999 the Russian President resigned, he was immediately granted an amnesty from prosecution for any crimes he might have committed while in office. The "Sicilianization" of Russia and other CIS countries seems unlikely to provide the institutional framework for dynamic economic development.

(xi) Growth of corruption

Under the old regime there was extensive corruption,[305] but the collapse of Communism has seen a dramatic increase in corruption. So much so, that in some countries, kleptocracy has become a significant ingredient of their political system. This growth of corruption resulted from state collapse, the rotation of elites, and the widespread failure to introduce and enforce appropriate legal and cultural norms.

If one ranks countries by their perceived level of corruption according to Transparency International's 1999 Corruption Perception Index,[306] then three transformation countries – Slovenia, Estonia and Hungary – are less corrupt than Italy, and one transformation country – the Czech Republic – is only just more corrupt than Italy. However, a number of CIS countries – the Republic of Moldova, Ukraine, Armenia, Russia, Georgia, Kazakhstan, Kyrgystan, Uzbekistan, Azerbaijan[307] – are exceptionally corrupt (significantly more so than even China or Ghana) as is one non-CIS transformation country – Albania.

Corruption and theft of public money has serious consequences for efficiency, distribution, incentives and the political system. As far as efficiency is concerned, the additional cost of bribes increases costs and wastes resources. It also creates "public bads", such as officials who prey on the public and businesses rather than providing the "public goods" that they are formally meant to provide. It also distorts policy, since frequently policies are adopted because their supporters have offered the biggest bribes or the policy concerned offers the possibility of generating the largest "bribe tax". Frye and Shleifer compared the extent of the "grabbing hand" (i.e. corrupt officials) as it affected the retail trade in Warsaw and Moscow.[308] They concluded that it was a considerably more serious problem in Moscow. This may be a major cause of the much greater extent of the depression in Russia than in Poland, where the upswing has been led by dynamic newly created firms. The situation is no better in some other CIS countries. In Ukraine, "Without bribing local administration officials it is practically impossible [for small business] to survive.

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[301] S. Glazyev, *Genocide. Russia and the New World Order* (Washington, D.C., Executive Intelligence Review, 1999), pp. 1-33.

[302] D. Lvov, op. cit., p. 304.

[303] For one such description, see A. Kucherena, *Bal bezzakoniya* (Moscow, Politburo, 1999).

[304] Examples of such analyses are F. Varese, "Is Sicily the future of Russia?", *Archives europϑenes de sociologie*, Vol. XXXV, No. 2 (Cambridge), 1994; S. Pejovich, "The transition process in an arbitrary state: the case for the Mafia", IMAD, *IB Review*, Vol. 1, No. 1 (Ljubljana), 1997.

[305] K. Simes, *USSR: The Corrupt Society. The Secret World of Soviet Capitalism* (New York, Simon & Schuster, 1982); A. Vaksberg, *The Soviet Mafia* (New York, St. Martin's Press, 1991).

[306] Internet website (www.transparency.de).

[307] The countries are listed in order of increasing perceived 1999 corruption. Of the 99 countries included in the index, the Republic of Moldova and Ukraine are the 75th most corrupt, and Azerbaijan the 96th. The CIS country with the best perceived corruption performance is Belarus which came 58th.

[308] T. Frye and A. Shleifer, "The invisible hand and the grabbing hand", *American Economic Review*, Vol. 87, No. 2 (Nashville, TN), May 1997.

The former Ukrainian vice-minister of economy, V. Pyznyk, estimates that in order to open a small business in Ukraine, you need to hand out nearly $2000 in bribes. This all means that entry costs are rather high. According to many business people interviewed in Zaporizhzhya, the number of small- and medium-sized enterprises declined since 1994 as purchasing power of the population diminished rapidly and as the local bureaucracy created numerous obstacles to private entrepreneurs, especially those producing goods."[309]

As far as distribution is concerned, corruption reallocates resources to the rich and powerful and is ultimately paid for by the general public.

As far as incentives are concerned, corruption distorts the energies of officials and citizens towards socially unproductive rent seeking. Corruption creates risks, generates the need for unproductive preventive measures, and distorts investment away from areas with high corruption.

As far as politics is concerned, corruption breeds popular alienation and cynicism, the use of "the struggle against corruption" as a weapon in the political struggle, and in some cases popular support for a strong man who promises to root out corruption.

(xii) Armed conflicts

Unfortunately there have been a large number of armed conflicts in the transformation countries.[310] As Mukomel and Payin have noted:[311] "Beginning in the late 1980s, within the post-Soviet space there have been six regional wars or protracted armed clashes involving regular military contingents and heavy weaponry (Karabakh, Abkhazia, Tajikstan, South Ossetia, Trans-Nistria (*Pridnestrovye* in Russian) and Chechnya), about 20 short-term armed clashes accompanied by casualties among civilians (the most significant in the Fergana valley and Osh and in pogroms in Baku and Sumgait), and more than 100 non-armed conflicts – interstate, interethnic, interdenominational and interclan confrontations. Within the regions immediately impacted by regional conflicts and surges of bloody conflict, no less than 10 million people lived."

Mukomel and Payin estimate the number killed in these conflicts at about 100,000 and the number injured at 500,000 (these figures exclude the second Chechen war).

The other area of armed conflicts has been in the former SFR of Yugoslavia. The wars in Bosnia and Herzegovina, Croatia and Yugoslavia caused extensive loss of life, numerous injuries, substantial migration and widespread damage to property.

5.3 Who has borne the costs?

(i) Industrial workers

In general, during the transformation the pay of industrial workers has fallen (both absolutely and relatively), their employment and payment security has greatly declined, and their opportunities for training have often been reduced.

(ii) Budget sector employees

Budget sector workers (teachers, doctors, police, etc.) have frequently seen their pay fall (both relatively and often absolutely) and their employment security drop. In the CIS countries they have often been victims of delayed pay. This decline in their economic position is one of the reasons for the widespread corruption in these sectors.

(iii) Rural population

A variety of studies have drawn attention to the deterioration in the economic position of the rural population. In Russia the burden of inadequate facilities and "deferred maintenance" of school buildings have particularly affected rural schools.[312] On the other hand, in Ukraine it seems that in 1997 the rural population (which had greater access to land) had a higher per capita food consumption than the urban population (which depended on the purchasing power of wages).[313]

(iv) Children

In many transformation countries a high proportion of children live in poverty. This is largely a result of low real wages. As the 1995 Latvian family and fertility survey observed, "even if both parents work, they do not earn enough to meet the basic needs of a family with children".[314] Family allowances are normally inadequate to compensate for this. Where they were substantial (e.g. in Hungary in the first half of the 1990s) they have frequently been cut in the interests of macroeconomic stabilization.

(v) Refugees and displaced persons

The transformation has been accompanied by the creation of large numbers of refugees and displaced persons. This has resulted from the nation building and wars taking place in the region. In particular, the significant number of refugees and displaced persons from the social and military conflicts in the former SFR of Yugoslavia and former Soviet Union was one of the biggest social costs of the transformation process.

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[309] H. van Zon et al., op. cit.

[310] V. Mukomel and E. Payin, "The causes and demographic-social consequences of interethnic and regional conflicts in the post-Soviet Union", in G. Demko et al. (eds.), op. cit.; M. Dinkic (ed.), *Final Account* (Belgrade, Stubovi kulture, 1999).

[311] V. Mukomel and E. Payin, op. cit., p. 177.

[312] E. Breeva, op. cit., p. 83.

[313] D. van Atta, "Houshold budgets in Ukraine: a research report", *Post-Soviet Geography and Economics*, Vol. XXXIX, No. 10 (Palm Beach, FL), December 1998.

[314] UN/ECE and UNPF, *Fertility and Family Surveys in Countries of the ECE Region: Latvia* (United Nations publication, Sales No. GV.E.98.0.4), p. 46.

(vi) Women

The effect of the transition on women has been examined in an excellent UNICEF study from which much of the following is taken.[315] In the old system, women were at a great disadvantage compared with women in OECD countries or men in their own countries, because of their very long hours of work. They had to combine a full working day in their paid employment with long hours of unpaid domestic work (the "double burden"). Their working hours were longer than those of their menfolk since a disproportionate share of domestic work was done by women. They were longer than in OECD countries because of the endemic queues and shortages which made shopping very time-consuming, and the relatively low quantity and poor quality of household appliances. In addition, women were the victims of a lack of modern contraceptives and hence a large number of unwanted pregnancies.

During the transition both women and men have benefited from the reduction in shopping time and the increased variety of consumer goods resulting from price and trade liberalization. Because of their greater domestic responsibilities, women have benefited disproportionately from this. They have also, however, suffered disproportionately in those countries where real incomes have fallen, from the strain resulting from the attempt to balance household budgets under conditions of declining real incomes.

Both men and women have been hit during the transition by the decline in employment. Women who lost their jobs, however, have disproportionately left the labour force altogether, becoming full-time housewives. How should this be evaluated? Interviews with the wives of Russian businessmen suggest that the women concerned evaluate it variously. Some enjoy their new lady-of-leisure status, some suffer from social isolation and some use their time to undergo training for business positions.[316] Another avenue for women who have lost their formal sector work has been prostitution. In the mid-1990s almost 2 per cent of employed women in Latvia were "sex workers". In a survey of prostitutes in Riga in 1995 more than 60 per cent stated that unemployment had caused them to take up this activity. Among potential female entrants to the labour force, there seems to have been a general increase in their participation in tertiary education. This bodes well for future female labour force participation.

As far as the growth of self-employment and employment in the private sector is concerned, this seems to have primarily benefited men. Similarly, entrepreneurship is a largely male activity. (Some women, however, have ventured into these new fields of activity.)[317] On the other hand, there has been a slow growth in part-time employment. In addition, in central Europe the gender pay gap has narrowed.

(vii) Men

Men constitute the majority among the winners – the new rich, senior government officials, the Mafia bosses, the new market professionals (marketing, finance, and other business services) and successful entrepreneurs. This is scarcely surprising. More surprising is that males seem also to constitute the majority of the worst victims of the transformation.

A Russian study has pointed out that the bottom of the social heap in contemporary Russia comprise mainly males.[318] This is so both with respect to homeless and destitute adults and with respect to street children. The former seems to be mainly a result of alcoholism and marriage breakups, the latter of the greater willingness of boys than girls to run away from home as a result of beatings and maltreatment.

One red herring introduced into the debate on the effect of the transformation on men, is blaming the transformation for creating large numbers of "missing men". The concept of "missing women" was introduced into international discourse to draw attention to the fact that in some countries, for example in south Asia, the number of women compared to men is much lower than it would be if the relative survival rates of women and men were the same as in the advanced countries. The difference between the actual number of women and the hypothetical number, is the number of "missing women". This terminology and calculation draws attention to the fact that in the countries concerned throughout their lives, with respect to food, medical care, education and attention, women are treated much worse than men. In the transformation countries, however, the problem is not "missing women" but "missing men". That is, the number of men actually alive is much less than it would be if the relative survival rates of men and women were the same as those in the advanced countries. The existence of significant numbers of "missing men" was pointed out in a recent report by UNDP.[319] However, this report was very tendentious in treating all these missing men "as a measure of the toll on men of the shock inflicted during the transition". The reason that this is very tendentious is that most of the missing men were already missing prior to the start of transition and hence their being missing could not possibly be a result "of the shock inflicted during the transition". The UNDP report draws attention to the fact that there were 5.9 million missing Russian men in (mid-) 1994, and uses this to stress the social costs of the transition. However, it fails to consider whether this was a new phenomenon in the mid-1990s, resulting from the transformation, or a familiar old problem inherited from the Communist past. The data source used by the UNDP report is the United Nations *Demographic Handbook* for 1997. Prior to 1994, the last year for which this source gives a gender breakdown of the Russian population is 1989 (the year of the last full census). Applying the UNDP method to that year, one finds that there were then 6.5 million "missing men". Applying the UNDP method to the official Russian estimate of the number of females and males at the beginning of 1992, i.e. immediately prior to the radical economic changes introduced by the new Russian government, the number of "missing men" then was 5.75 million, i.e. about 98 per cent of that in (mid-) 1994. Hence, it can be seen that the problem of "missing men", i.e. the unusually large gap in life expectancy between men and women, is not a new problem created by post-1991 policies, but a sad phenomenon inherited from the Soviet period.[320] The increase in "missing men" between January 1992 and mid-1994 was only a minute share of the total number of missing men in mid-1994.

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[315] UNICEF, *Women in Transition*, Regional Monitoring Report, No. 6 (Florence), 1999.

[316] O. Zdravomyslova and M. Arutyunyan, *Rossiiskaya sem'ya na evropeiskom fone* (Moscow, Editorial URSS, 1998), pp. 157-161.

[317] For a discussion of women entrepreneurs in Russia and Lithuania, respectively, see A. Chirikova, *Zhenshchina vo glave firmy* (Moscow, Institute of Sociology, Russian Academy of Sciences, 1998); R. Aidis, "Women and entrepreneurship in Lithuania: characteristics and significance", *The Role of Social Sciences in the Development of Education, Business and Government Entering the 21st century* (Kaunas, Kaunas Polytechnical University, 1999).

[318] D. Lvov, op. cit., p. 146.

[319] UNDP, op. cit., p. 42.

This shows that this alleged "social cost of transition" is just a misinterpretation of the demographic data. As for the actual cause of the large number of missing men in Russia and certain other transition countries (Ukraine, Latvia, Lithuania, Hungary), it seems to result largely from lifestyle factors (mainly gender differences in drinking and smoking).

(viii) Roma

One group that lives in poverty throughout central and eastern Europe (and frequently also in western Europe) are the Roma. They tend to have high unemployment, low incomes, poor housing and poor education. It seems that in some respects their economic position was worsened by transition. Under the old regime they often had jobs in industrial enterprises which have now restructured or closed down completely. In market economies the need for unskilled workers is much less than under state socialism. They were the victims of genocide under the Nazis, and have been subject to extensive violence and discrimination in recent years.

Recently considerable attention has been devoted to the plight of this group by organizations such as the Council of Europe and the OSCE. The well-known financier and philanthropist, George Soros, has donated money to Roma causes. Some governments, such as that of Hungary, have begun to formulate enlightened policies on this issue. Nevertheless, the provision of education and housing for the Roma, so that they can obtain jobs and earn reasonable incomes, everywhere lags behind what is needed to achieve social inclusion within a reasonable period. One of the few positive developments with respect to the Roma in recent years is that they have begun to establish their own organizations and hence have acquired a greater political presence. From being an object of social policy they are slowly developing into an interest group in a pluralist society. However, the problem of poverty among them is bound to remain as long as their educational level remains low and they remain unqualified for well-paid work. Obvious relevant public policies are: positive discrimination in the allocation of jobs and public contracts (in 1998 the Czech minister without portfolio Mlynar who was responsible for Roma affairs suggested that firms owned by or employing Roma should receive about 5 per cent of all government orders); ensuring that Roma have the same rights in the field of transfer payments and medical care as the rest of the population; and ensuring that Roma children attend school.

(ix) Russians

Russians are one social group which has suffered relatively more than others from the transition. In addition to the social costs paid by the inhabitants of the Russian Federation, to which attention is drawn in this paper, one important result of the breakup of the Soviet Union was to leave about 25 million Russians in the non-Russian successor states of the Soviet Union. From being members of the dominant ethnic group of a multinational state, these people were suddenly transformed into members of an ethnic minority. They frequently became aliens, deprived of citizenship of the country in which they lived. Their language, formerly the dominant one, became a minority one, and citizenship of their new country frequently required mastering the local language. In some countries they were a suspect and discriminated-against group, and in all the non-Russian successor states of the Soviet Union their relative position on the labour market worsened dramatically. In the Baltic states and Kyrgyzstan privatization of farmland excluded almost all Russians from receiving any. It is not surprising that millions of them emigrated to Russia, often losing their homes and furniture in the process and having difficulties in finding work in their new country.

(x) Savers

The high rate of inflation in a number of countries, the numerous pyramid schemes and the widespread banking collapses, have robbed many people of their savings. This has affected many people very adversely, and in one country – Albania – led to a national uprising. Particularly badly affected were the holders of (the more than 220 million)[321] deposits in the former Soviet state savings bank, which lost almost all their value in the great inflation of the early 1990s.

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[320] The UNDP argument concerns all the transition countries, not just Russia. However, the number of missing men in 1994 in Russia alone was about 60 per cent of the total, and the number in Ukraine, to which the arguments in the text above also apply, about 27 per cent.

[321] At the end of 1990 there were 220 million deposits. During 1991 the number increased.

5.4 Why has there been so little political protest?

Given the magnitude of the social costs of the transformation, one might have expected widespread political protest, with riots, strikes, political upheavals and economic policy reversals commonplace. In fact, with the exception of Albania in 1997, popular upheavals have been conspicuous by their absence. This in spite of the fact that the neo-liberals have frequently warned of the populist dangers, and their opponents have frequently warned of the political dangers of the neoliberal policies. What explains this stability?

This question has been investigated by Greskovits.[322] He stressed certain structural legacies of the old regime (absence of large inequalities, the initial absence of significant long-term poverty, provision of welfare services, absence of large shantytowns, compromised trade unions, tradition of cooperation between trade unions and management), which distinguished the situation in eastern Europe from that in Latin America. He also pointed to the structural and institutional consequences of the implemented neoliberal measures, such as the growth in unemployment, the decline in union membership, the growth of the private sector, the increase in employment insecurity and the opportunity to protest by voting the government out, which have all contributed to political stability.

Greskovits also drew attention to the fact that an important reason for political stability is that neoliberalism has enhanced the possibilities for, and the gains from, expressing discontent by means of "exit" rather than "voice" (to use Hirschman's well-known distinction). The two main means of exit have been informalization, that is earning money in the informal sector, and emigration. In many countries the informal sector is large and provides an important part of the answer to the question as to why policies which have had such adverse effects on activities in the formal sector have given rise to such little organized opposition. Similarly, emigration is important throughout the region.

Both informalization and emigration can be considered economic pathologies resulting from the policies pursued. Informalization reduces fiscal income and undermines the financing of public services (and in the form of subsistence agriculture and petty retail trade is very inefficient). Emigration leads to the loss of large numbers of young, and often well-qualified, potential workers. On the other hand, where informalization generates incomes that could not be generated in the formal sector (because of the "grabbing hand", taxes or inadequate incomes) it must be considered a positive phenomenon. Similarly, remittances from emigrants (as in Albania) or the return to their home country of those who have temporarily worked abroad, as in the Baltic states and Poland, can be a useful addition to a country's human capital. Furthermore, emigration may benefit the migrants themselves, even if it represents a loss for the their country of origin.

Other factors strengthening the political viability of the measures adopted have been their international support (from the international financial institutions, the EU and the international business community) and the gains from them to the elite (opportunities for looting, increased consumption, acquisition of overseas assets).

Greskovits concluded that eastern Europe exhibits a low-level equilibrium, with incomplete democracy and an imperfect market economy, and this is likely to be quite stable. While not a first best solution, it is viable and is a second best one.

In addition, there are some important factors not considered by Greskovits. The transformation has brought not only social costs but also social benefits. For example, the increased availability and variety of consumer goods resulting from price and trade liberalization has had many positive consequences. These range from the reduction in unwanted pregnancies resulting from the increased availability of contraceptives (most of which are imported), via the increased mobility resulting from the spread of car ownership (except in those capital cities where increased congestion has led to a decline in average speeds), to the cultural, recreational and economic (shuttle trade) benefits from increased foreign travel. Furthermore, the interest and variety of the media has frequently increased. Moreover, the possibilities for legal self-employment and entrepreneurship have greatly increased and have been seized by millions of people. In addition, the political changes have brought many social benefits, ranging from independent trade unions, schools/universities and churches, to the greater freedom of nations which formerly lived under an imposed and unwelcome political-social-economic system. These social gains, and their positive evaluations by the populations concerned (or at any rate those within them that have benefited from them), are also part of the explanation of the lack of political protests.

Another factor not considered by Greskovits is the following. Exit is primarily relevant for the young and skilled. Many of those most adversely affected by the changes, however, have been middle-aged and elderly, and without the skills in demand in a market economy. Hence Greskovits does not explain the lack of voice by the great mass of losers. Explanations of this phenomenon have, however, been offered by Ashwin and by Christensen, whose work is more relevant for the CIS countries (Greskovits focuses mainly on central Europe).[323] Ashwin argues that the patience of dissatisfied Russian workers can be explained as a result of a combination of alienated collectivism (the relationship of workers to their enterprises in Soviet times) and individual survival strategies. Neither of these are conducive to effective collective protest. In addition Christensen draws attention to the depression, the lack of resources of worker organizations and the lack of enforcement of the laws. All these weaken the possibility, and the point, of collective protest.

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[322] B. Greskovits, *The Political Economy of Protest and Patience* (Budapest, Central European University Press, 1998).

[323] S. Ashwin, "Endless patience: explaining Soviet and post-Soviet social stability", *Communist and Post-Communist Studies*, Vol. 31, No. 2 (Oxford), 1998; P. Christensen, *Russia's Workers in Transition: Labor, Management and the State Under Gorbachev and Yeltsin* (DeKalb, IL, Northern Illinois University Press, 1999).

5.5 How does the present system change compare with the previous one?

(i) The collapse of the Russian empire and the transition to socialism: Russia, 1917-1922

It is important to realize that the current transformation in eastern Europe is not an ordinary type of economic policy but a change of the socio-politico-economic system. This means that when thinking about its costs, it is appropriate to compare it not with, for example, conventional macroeconomic policies in OECD countries, but with the previous system change in the area. For the CIS countries, that was the collapse of the Russian empire and the transition to socialism in 1917-1922, for the three Baltic countries the expansion of the Soviet empire and the transition to socialism in 1940-1941 and 1944-1949, and for the rest of the former eastern Europe the expansion of the Soviet empire and transition to socialism in 1945-1949. These systemic changes were also marked by substantial social costs. In the former Russian empire there was a long and bloody civil war, a variety of national wars (Finland, Poland, the Baltics and central Asia), foreign military intervention, a major famine (in 1917-1922, first in central Asia, then in the Russian cities, and then along the Volga) and substantial emigration. In 1918-1922, war, disease and famine seem to have caused about 12.5 million excess deaths.[324] Emigration seems to have been about another 2-3.5 million. These events constituted a demographic disaster (although less than that of the Second World War). In this period there was also a huge decline in output and hyperinflation. Writing about the 1990s in "the former Soviet bloc", a recent UNDP report argued that: "The extent of the collapse in output and the skyrocketing nature of inflation have been historically unprecedented."[325] This erroneous statement ignores what happened during the previous system change in the former Soviet Union area.

(ii) The expansion of the Soviet empire and the transition to socialism: eastern Europe, 1945-1949

The number of victims of the expansion of the Soviet empire and transition to socialism in eastern Europe was much smaller than those of the collapse and system change in the former Russian empire, but not insignificant. The small-scale civil war in Poland in 1944-1947 seems to have cost about 20,000 lives.[326] The deportation of Ukrainians from south-east Poland to the former German territories seems to have involved about 140,000 people. On the other hand, in the second half of 1952, at the height of Stalinism, there were only (according to official statistics) 49,500 political prisoners in Poland.[327] The number of political prisoners seems to have been greater in Czechoslovakia, despite its smaller population.[328]

The largest social cost of this period was probably the expulsion and flight of Germans from Poland, Czechoslovakia, Hungary and Yugoslavia, which seem to have involved about 9.5 million people. This major social cost can perhaps be treated more as a cost of the Second World War than of the change in the socio-political-economic system in the countries concerned.

5.6 Conclusions

The post-1989 transformation was a change of system that had serious adverse social consequences for much of the population. These consequences, however, were in general less than the costs of previous systemic changes in the region.

These consequences included widespread impoverishment, a decline in employment, growth in unemployment, increased inequality, a decline in publicly-provided services, social exclusion and, in some countries, a worsening of the health of the population.

Some of the negative social phenomena observed during the transformation, and sometimes ascribed to the transformation, were not in fact caused by it. For example, although there were almost six million missing Russian men in 1994, it is not true that this was a consequence of transformation. Nor is it true that transformation directly followed a period of successful economic policy during which living standards rose.

In Russia there was a sharp increase in mortality in 1988-1994 and in 1999 (and the first half of 2000), and there were analogous developments in other CIS countries (e.g. Kazakhstan). The main proximate causes of the increase in mortality in Russia in 1988-1994 seem to have been an increase in alcohol consumption and in stress. The main ultimate causes of the increases in Russian mortality seem to have been state collapse and state failure. The high levels of mortality in some CIS countries, notably Russia and Kazakhstan, which particularly affect adult males, are major socio-economic problems for those countries. Effective policies to limit alcohol consumption would make an important contribution to reducing these high levels of mortality.

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[324] R. Davies et al. (eds.), *The Economic Transformation of the Soviet Union, 1913-1945* (Cambridge, Cambridge University Press, 1994), pp. 63-64.

[325] UNDP, op. cit., p. 13.

[326] According to a communist writer, cited by W. Brus, "Postwar reconstruction and socio-economic transformation", in M. Kaser and E. Radice (eds.), *The Economic History of Eastern Europe 1919-1975*, Vol. II (Oxford, Clarendon Press, 1986), chap. 22, p. 569, the number of people killed on the government side was 15,000. According to the anti-communist writer A. Paczkowski, "Pologne, la 'nation-ennemi'", in S. Courtois et al., *Le livre noir du communisme* (Paris, Laffont, 1997), p. 439, losses on the anti-communist side were about 9,000.

[327] A. Paczkowski, op. cit., p. 445.

[328] K. Bartosek, "Europe centrale et du sud-est", in S. Courtois et al., op. cit.

It is not true that the declining (officially registered) population of Russia and some other countries is a sign that they are the victims of genocide. Some EU countries (Italy, Germany and Sweden) also have an excess of deaths over births. Furthermore, whether the population of Russia really did decline in the 1990s is uncertain in view of the poor quality of the data on net immigration. The long-term decline in the birth rate throughout Europe is a result of deep-rooted pan-European social trends. On the other hand, some sharp short-term fluctuations, such as the dramatic decline in the birth rate in the former GDR in the early 1990s, clearly did result from the transformation. The same probably also applies, at least in part, to the sharp decline in the 1990s in Russian fertility. The level of mortality in Russia worsened during the transformation, and is currently at a very high level by European standards, but the break with pan-European trends goes back to the mid-1960s.

The transformation has led to the growth of a variety of socio-economic pathologies, such as corruption, criminalization, informalization, alcoholism, and tobacco and drug addiction.

There are sharp differences between transformation countries. Whereas some are already (with respect to such indicators as health and corruption levels) Europeanized, others lag a long way behind EU levels. In place of the former homogenous socialist camp, a sharp polarization has developed between countries. Unfortunately, the majority of the population of the region lives in the relatively unsuccessful countries.

The absence of widespread political opposition to neoliberal policies is not necessarily a sign that these policies have widespread support. It is partly a result of the inheritance from the old regime, and the structural and institutional consequences of the measures adopted, particularly the enhanced opportunities for exit, together with the importance of individual survival strategies, the lack of resources of worker organizations and the lack of enforcement of the laws. In addition, it is partly a result of the international support for the measures, and the gains to the elite from them. These factors have combined to make the neoliberal policies feasible, and for some people attractive, despite their social costs.

The transformation has brought not only social costs but also many social benefits (such as easier access to modern contraception, increased foreign travel, more interesting media, greater possibilities for legal self-employment and entrepreneurship, in some cases a reduction in national oppression, etc).

In the twentieth century the unfortunate people of the CIS were the victims of two imperial collapses (of the Russian empire and the Soviet Union) and two abortive transitions (to an attractive socialism and to a civilized market economy), as well as a domestic terrorist regime (1929-1953) and a ghastly war (1941-1945). This combination of misfortunes had enormous social costs.

Discussion of chapter 5

5.A Alexandru Athanasiu

I will point out some main issues concerning social policy in the transition economies of eastern and central Europe, but basically I will refer to Romania as an example. The effects of replacing the economic system have generated some radical changes in human resources, markets and social services. First of all we must consider some elements that have been characteristic of all the central European economies during the transition process. One of these has been the significant increase in unemployment rank as a result of industrial reorganization. The approach to the unemployment issue has emphasized the passive side of social safety net and not enough active support for reducing unemployment and for reintegration in the labour market. At the same time, legislative measures to encourage early retirement have distorted the relation between taxpayers and beneficiaries. Thus, in Romania, there were about four contributors per pensioner in 1989 but in 1999 the ratio had fallen to 1.2.

The communist laws on retirement in Romania basically apply only to salaried employment: the only contributors to the public pension systems were employees in the budgetary sector and the workers in industry; other active people were excluded. Thus because of the falling number of employees between 1990 and 1999, from some 7 million to 4.8 million, the number of contributors to the public pension system was dramatically reduced. Another problem has been created by the continuing incapacity of a number of state companies to pay their pension contributions. These factors underline the dramatic situation of pensioners, and of the liquidity of pension systems, not only in Romania, but also in other countries such as the Republic of Moldova and Russia, where pensions are frequently not paid for several months (6-9 months).

What was done about social policies during this period? Concerning unemployment and social protection, there were two types of measures: the passive measures, implemented for the first time in the 1990s in all these countries, and consisting of transfers to replace earned income; and active measures consisting of fiscal concessions to employers who hired unemployed people, of professional redeployment policies or subsidized employment, systems of compensatory payment for all employees subject to collective lay-offs. But under present circumstances, new measures are needed to deal with technical unemployment, such as the one for construction employees during the winter season in Romania, a financial fund managed by the social partners under the name of the “building workers aid fund”. We must also note the structure of unemployment during this past decade. Unemployment started to increase in the early 1990s reaching 11.3 per cent in Romania in 1994, declining to about 8 per cent for a short period from 1995 to 1997, and rising again in 1999 to 11 per cent. The changing structure of unemployment in Romania is very interesting. In the early 1990s it was a question of women and elderly people, but young people now account for a large proportion, which is much more dangerous.

To close my remarks, I want to point out the measures I think have to be taken in this particular field of social protection. First of all, we have to develop special programmes addressed to young people and especially the long-term unemployed. In other words, the weight of active social protection measures has to be increased relative to the passive ones. Special programmes for increasing employment based on social partnerships at both the legal, local and national levels must be developed, as well as special programmes to encourage employers to hire the unemployed from particularly disadvantaged groups, such as women, the long-term unemployed and so on. We also have to develop the process of monitoring and evaluating the employment policies’ process initiated by the European Commission in order to implement the guidelines of the European employment policy. To end I would like to repeat something extremely nice said, not by me, but by a remarkable woman: “we are not living in a world of absolute alternatives, capitalists or communists, public sector or private sector, market or state. We have to think and believe that we have to choose between a dynamic economy and a more fair society. In this globalization period of time, this kind of dilemma, this kind of choice is not a real one, we need both competitivity on the economical level and a right social reform in order to strengthen the institutions which are outside the market but which are extremely important both for the economy and for our society. I think that economic dynamism and social justice have to live side by side.” This was said by Patricia Hewitt, Minister of Trade and Industry in Great Britain and I have to say that I completely agree with her; we need a policy that will finally bring the transition because if it goes on for too long it will simply exhaust all those involved. That would be a serious matter. But at the same time it is important to achieve a rate of economic growth that will produce an increase in stable employment for all members of society who desire it.

5.B Martina Lubyova

During my remarks we shall remain in "the valley of tears". Coming from Slovakia, I hope I can provide some insights from the perspective of the so-called accession countries, the 10 central east European countries that are now queuing for membership in the EU. I would like to dwell for a few minutes on two key groups of losers, one of them not explicitly mentioned in Michael Ellman's paper, which I think represent a real threat to social cohesion in these countries. I do not think that it was by chance that Mr. Athanasiu started his presentation by mentioning pensioners and the problems of pension systems. I do not think that I am over dramatizing when I say that it is in these countries that pensioners and those close to pensionable age were sentenced to poverty by the kind of transition that has occurred in these countries. The degree of poverty, of course, varies from country to country, but even in countries applying for EU membership, in Hungary for example, the impoverishment of pensioners has been so dramatic that without family members to support them, they are sentenced to a terrible and helpless condition. Having contributed all their working careers to a system which would have provided them with equal but decent standards of living, they are now facing ever-declining replacement rates and an ever-declining real value of their pensions. They have been virtually pushed out of employment and are unable to work any more. Once they come close to retirement age, they are pushed out of the labour force because early retirement has been used in most of these countries as a means of alleviating the burden of unemployment. I would say that one third of the population is in this very bad situation of not having a clear idea of their future because of the overall ageing problem. Most of these countries have already started pension reforms by introducing some funded schemes, which reduce still further the resources available to the current generation and those close to pensionable age. The future for these people is unclear and they feel helpless. They were unable to accumulate assets under the previous socialist regimes and now they are trapped in systems which in real terms are in decline. The importance of this development is that, first, these people are voters, and *the* voters who are really interested in political life. They do not threaten to emigrate as they are not mobile any more, which is perhaps good news for the EU. I would mention the example of Slovakia, where the previous coalition government had the major support of pensioners, and where, as Professor Ellman points out, inequality did not really increase during the process of transition. This is quite a striking fact and suggests the leverage exercised by pensioners in Slovakia. Slovakia is one of the countries which has not really implemented any kind of pension reform until now. It still retains the old pay-as-you-go socialist system with only small cosmetic changes: the system lacks an indexation formula and so all pensions have to be raised frequently on an ad hoc basis in nominal terms. What happens in practice, given the lack of resources, is that the lowest pensions are raised to the level of the social minima while the higher pensions are not increased at all. So there is an increasing convergence in the level of pensions. As the country has 5 million inhabitants, a labour force of 2 million and 1 million pensioners, pensioners account for about one third of income recipients. So this explains why pensioners have to be taken into account and why their perspectives are important for domestic political development.

The second group I would like to draw attention to, although mentioned in Professor Ellman's presentation, is the Roma ethnic minority. In the paper there is mention of the ethnic conflicts in the Balkan countries, in Russia and Chechnya, but I would like to speak about countries such as the Czech and Slovak Republics, Hungary and Romania where this ethnic group constitutes a social time bomb. Traditionally, the Roma have lived under the worst social conditions, both during the socialist period and since: the decline in their living standards has been the most dramatic of any group in the countries that I have just mentioned. The decline in fertility that was mentioned in the paper does not apply to the Roma ethnic group. Thus, in the Slovak Republic, the total population between 1990 and 1998 increased by roughly 1 per cent while the Roma population increased by 17 per cent. So this is a large difference, and there are some demographic forecasts which suggest that if these trends are maintained, over the life cycle of four generations of 50 years, roughly half the population will be in the Roma ethnic group. So these are really interesting figures, but the problem may be even more urgent than it seems because one of the key problems with the Roma is that nobody really knows how many of them there are: the only reliable source of information is the population census which tends to understate their numbers because membership of the ethnic group is a matter of self-declaration. The official numbers may be as much as 10 times smaller than the real numbers. For most of you the Roma have become visible during recent years as a result of Roma applications to some western countries for political asylum on ethnic grounds. The reaction of the EU to this movement has been one of panic despite the fact that the order of magnitude of this phenomenon is only several hundreds of people. The reaction has been to reintroduce visa obligations for citizens of several countries, not the best political signal to those countries which are preparing for EU accession. The last point I would like to make concerns this problem of EU accession and the problem of providing appropriate standards of social security in the central east European countries, as part of the effort to avoid massive outflows of workers to the EU countries. In this respect we have to distinguish between two groups of countries: one is where there is extreme poverty such as in Albania or Romania and the other consists of countries ravaged by the wars in the Balkans. Research by the International Organization for Migration in the latter countries suggests large numbers of people wish to migrate to the west for good: without any clear perspective of the future, unable to talk to their neighbours any more, there seems little option but to migrate permanently with their families. Whereas in the former group of countries, people are more interested in a temporary migration to exploit international wage differentials. After a limited period of working in the west, they want to return home where the purchasing power of their western wages is much higher than if they remained in the west. Given this motivation, it is remarkable that the EU should have introduced such policies towards their neighbours in countries such as the Czech Republic, Hungary, Poland and Slovakia. Although the citizens of these countries are not subject to visa obligations, they are at the same time subject to very restrictive quotas regulating access to the EU labour market. The general quotas are open to competition from citizens from the rest of the world and the quotas under bilateral agreements with the EU are very small (usually of the order of several hundred workers). So in this situation, of the two strategies of migration and informalization mentioned in Michael Ellman's paper, informalization is actually stimulated by this policy of the EU. Given the existence of large wage differentials, free access to the EU but not to the labour market, huge informal sectors are a logical outcome, not only in the west but also in the east because those working clandestinely in the west are often registered as unemployed in the east and drawing some kind of social benefits. In countries with double-digit unemployment rates it is really difficult to monitor what people are actually doing. The European Social Fund, one of the largest structural funds of the European Union, was established many years ago with the aim of promoting the circulation of people in order to achieve greater allocative efficiency by securing a better match of people to available jobs. It seems to me to be short-sighted and inconsistent to have this major structural tool for promoting mobility but at the same time to draw this artificial line between these groups of countries.

5.C Alena Nesporova

The transition economies of central and eastern Europe have been exposed to multiple shocks during the last decade. Political changes paved the way for systemic, economic and social reforms, which changed their internal economic parameters but also contributed to a rapid collapse of the CMEA market. Strongly protected domestic enterprises were suddenly confronted with shrinking internal and external demand and the need to search for new markets in an environment of harsh global competition and rapid technological changes. A number of transition countries were also hit by the negative effects of re-emerging nationalism and ethnic tensions, which had been suppressed but remained latent under the previous regime. They resulted in the breakup of the USSR and SFR of Yugoslavia and in the split of Czechoslovakia. Unfortunately, in Yugoslavia and the Caucasian region extreme nationalism turned into armed conflict, seriously affecting not only the countries involved but also their neighbours.

The negative social consequences described in Professor Ellman's paper thus result from all these shocks and failed policy responses. The author gives a long list of the detrimental effects of the transition crisis. Their depth and duration have varied for different subregions, leading to increasingly divergent development inside the region. I will extend his analysis in the field of employment and contribute some considerations about the past and the policies now required to address employment and social problems.

Official statistics on the decline in employment do not provide the full picture of labour market developments. On the one hand these data do not reflect the large amounts of hidden unemployment and underemployment within the formal employment figures and on the other hand the large-scale involvement of the population in the informal sector.

In the Russian Federation for example, according to the Russian Statistical Committee, 11.1 per cent of workers in the course of 1998 were put on administrative leave on the initiative of enterprise managements, i.e. they were actually temporarily laid off, while 10.1 per cent were working short-time. Many labour market experts doubt the reliability of the statistics on working-time losses caused by these measures. Field research reveals a large discrepancy between the extensive actual losses of working time and those reported.[329] Also large- and medium-sized enterprises tend to exaggerate employment in order to exercise more political power in the region or to benefit from direct or indirect subsidies. In addition, some 5 per cent of workers are paid extremely low wages reflecting their much reduced workload.[330]

The ILO enterprise survey of Ukrainian industry revealed that over 20 per cent of workers were on short-time work and 18 per cent on administrative leave in 1999. However, the survey also found that other workers not classified as being on short-time worked on average only 32 hours a week. In addition, many women were forced to take extended maternity leave in order to reduce the internal labour surplus in ailing industrial enterprises. As a result, at any time, about one third of all workers were actually laid-off although formally employed.[331]

The vast non-payment of wages can also be considered as another form of underemployment. According to a survey conducted by the All-Russia Centre of Public Opinion (VTsIOM) and the Russian Ministry of Labour and Social Policy, the proportion of workers receiving their wages in full and on time was only 25 per cent in March 1998. In Ukraine, over 80 per cent of all industrial enterprises paid wages with a delay exceeding 20 weeks on average in 1999. Problems with the delayed payment of wages are huge in all the CIS countries but they are not absent even in the economically stronger central European countries.

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[329] See, for example, S. Ohtsu, "How far hidden is the 'hidden unemployment' in transition Russia?", paper presented to the Budapest Seminar on Transition Labour Markets (Budapest), 17-19 September 1997.

[330] T. Gorbatchova, "Features on the formation of the labour market and its statistical measurement in Russia", paper presented at the Budapest Seminar, op. cit.

[331] G. Standing and L. Zsoldos, "Worker insecurities in Ukrainian industry: the 1999 ULSF", ILO, *Socio-Economic Security Report*, (Geneva), April 2000.

A number of workers also have second jobs. While the share of second jobholders in the formal sector contributes some 3-5 per cent to total employment in most transition economies, according to labour force survey (LFS) data, many more persons have second jobs in the informal sector.

Employment in the informal sector varies by country and tends to be larger in countries at lower levels of development and facing more labour market tensions. In Poland, a recent extended LFS revealed that 4.8 per cent of the population aged 15 and more were engaged in informal gainful activity in 1998, of whom 3.8 per cent were in urban areas and 6.4 per cent in rural areas. Informal employment was performed by 5.5 per cent of the employed, by 14.6 per cent of the unemployed and 2.4 per cent of those classed as economically inactive. For 21 per cent of those surveyed it was their main activity, regardless of their formal employment status. In comparison with the previous 1995 survey, the proportion of the population aged 15 and more declined by 2.8 percentage points, thus reflecting some improvement in the labour market and social situation.[332]

In the Russian Federation, a VTsIOM survey estimated that informal employment was the main activity of 7.5 million persons, i.e. 6.5 per cent of the population aged 15 and more in 1997. However, the Russian Tax Inspectorate estimates the share of the adult population with second jobs (registered and unregistered) at 35-40 per cent.[333] If this is so, total labour input has not actually declined much during the transition process: production has become more labour intensive while labour productivity has fallen sharply.

All these findings indicate that labour market flexibility has increased a lot. In central Europe it mostly takes the form of adjustments in the number of workers, while part-time or short-term work is still very limited in the formal economy, although quite widespread in the informal sector. In contrast, in the CIS countries labour market flexibility is manifested through fluctuations in hours worked and real wages (including the difference between contracted and actually paid wages and the huge accumulation of wage arrears) and in unregistered employment.

Layoffs have disproportionately affected women, persons with disabilities and health problems, unskilled and low-skilled workers, and some ethnic minorities disadvantaged by their insufficient command of the majority language (e.g. the Russian minority in ex-USSR countries) or low or obsolete skills (e.g. Turks in Bulgaria or the Roma minority throughout the region) and often exposed to discrimination by employers.

Registered unemployment has developed differently in central and south-eastern Europe as compared with the CIS countries. In the former group of countries there was a sharp increase in open unemployment in the first years of the transition followed by some decline and then stabilization. However, this seemingly favourable development was only partly connected with the recovery of demand for labour as many unemployed persons actually withdrew from the (formal) labour market when their benefits expired and no reasonably paid jobs were available or they opted for early retirement. Recently these countries have been confronted with further increases in unemployment resulting from a new wave of structural changes and from reforms of their national health insurance systems (e.g. Bulgaria, Poland). Unemployment measured according to the ILO definition by LFS is usually not much different from registered unemployment. But LFS unemployment exceeds registered unemployment substantially in the three Baltic countries and Bulgaria while in some other countries, most markedly in Croatia and Slovenia, it is the other way round. The differences can be explained by more or less strict national unemployment benefit systems (with the overall tendency to make the eligibility rules stricter) and variations in the assiduity of labour offices in checking job seekers as to their actual employment status, job search activity and readiness to take up offered jobs.

In the CIS countries, registered unemployment grew very slowly while LFS unemployment accelerated, exceeding several times the registered one. This gap between registered and LFS unemployment has again increased recently as a consequence of a deterioration in the actual labour market situation and shrinking funds at the disposal of national employment services. The reason for this large gap lies in the low propensity of job seekers to register at public employment offices, due to the low levels of unemployment benefits and their irregular payment, the modest supply of vacant jobs, in particular of those which are more attractive in terms of remuneration, required skills and working conditions, and the limited availability of labour market programmes.

Economic transition has resulted in an increased mobility of labour, both territorial (mostly in the form of commuting to work, including cross-border commuting and temporary work abroad rather than a change of residence inside the country or permanent migration) and occupational. However, with regard to the speed and extent of structural and technological changes, there is a need for much greater mobility. A considerable proportion of the population, even in the prime age group, are unwilling to be retrained for occupations demanded by the market or to seek jobs in another region: instead, they prefer to opt for unemployment or inactivity, supplementing their income by informal work.

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[332] Central Statistical Office, *Unregistered Unemployment in Poland in 1998* (Warsaw), 1999.

[333] Yu. Simagin, "On estimates of the size of additional (secondary) employment of the population" (in Russian), *Voprosy ekonomiki* (Moscow), January 1998.

In a number of countries the access to and quality of secondary and higher education have improved, partly as a result of competition between the public and the many new private schools. However, financial costs of attendance (including fees and other charges, textbooks and transportation or the accommodation of non-resident students) are growing rapidly and the state is unable to provide stipends to students from poorer families. As a result, in many transition economies there is an increasing social stratification of education, which will lead to deteriorating prospects for the employment of the low-income strata of the population and contribute to their social marginalization. In the CIS countries in particular, poor families in rural areas do not even send their children to school at certain times of the year either because they need their help with the harvest or because they cannot buy clothes and shoes for them. Until recently illiteracy was almost non-existent but it is now increasing, jeopardizing the chances of these people and the country as a whole to succeed in the global competition.

Due to the decline in fertility (associated not only with the difficult social situation of families with children but also with the new opportunities for young people who prefer to postpone or even give up having a family and children), rising mortality among the working age population in many countries and emigration, most transition countries are confronted with the problems of depopulation and ageing. The increasing proportion of the population at or close to pensionable age in relation to the working population is making national pension systems financially unsustainable and lowering the real value of pensions, often much below the subsistence minimum. Moreover, demographic changes will soon contribute to labour shortages and skill mismatches will increase unless appropriately addressed by the extended training of older workers.

The winners in the process of transformation are thus persons who are young, in good health, well educated, flexible, entrepreneurial and mobile, and those who have privileged access to enterprise assets. The losers tend to be persons with any kind of handicap in terms of age, gender, education, health, mobility or ethnic origin. As for countries, relatively more successful are those which have been able to maintain a reasonably narrow income distribution and the social cohesion of their population even though they have not so far been able to achieve sustainable economic growth and social development.

All the transition countries have adopted new laws or substantially amended existing ones with the aim of creating appropriate regulatory frameworks for their labour markets in the new conditions. They have also established national employment services and introduced income support systems and employment promotion programmes. Also their social protection systems have been gradually reshaped. However, so far, employment and social policies have not been very effective in mitigating the negative social consequences, above all because of constrained social budgets as a result of economic decline, falling real incomes in the formal economy, tax collection problems and pressures to reduce public expenditure. The poor targeting of social policy to those in real need and an overwhelmingly passive approach of labour market institutions to solving unemployment problems have added to the distress. Moreover, in all transition economies employment and social policies have not been coordinated and only weakly linked to economic, education and other policies. Nevertheless, they have managed to mitigate some of the worst effects on certain socially weak groups, such as pensioners.

In order to improve the labour market and social situation, there is a need for coordinated policies in order to increase the demand for labour as well as improving labour supply. On the demand side, a major role is to be played by economic policy, by the active stimulation of economic growth, structural adjustment and creation of good quality jobs. National education and training systems also have to be reformed in line with the concept of life-long learning in order to improve the quality of human resources and the adaptability of the labour supply to the changing demand for skills. At the same time labour market policies and social protection measures need to be well designed and coordinated, directed towards increasing the employability and mobility of the labour force and creating incentives for people to work and take up jobs in the formal economy while discouraging dependence on welfare and informal work. The problem of high unemployment, forced inactivity and social marginalization of disadvantaged population groups has to be addressed by well formulated and properly targeted policies to improve their capacity and promote their employment and social inclusion.

PART THREE

STATISTICAL APPENDIX

For the user's convenience, as well as to lighten the text, the *Economic Survey of Europe* includes a set of appendix tables showing time series for the main economic indicators over a longer period. The data are presented in two sections, following the structure of the text: *Appendix A* provides macroeconomic indicators for the market economies of western Europe and North America for 1985-1998, *Appendix B* does the same for the east European countries, the Baltic states and the Commonwealth of Independent States for 1980-1999.

Re-estimated historical series are not yet available for all the transition economies, and longer time series could in some instances be obtained only by splicing older data with the new statistics (as explained in the notes to the tables). For the market economies of western Europe and North America data for the more recent years may also be subject to revision as more comprehensive benchmark figures become available.

Data were compiled from international and national statistical sources. Details on recent changes in national accounts methodology were provided in chapter 7 of the previous issue of this *Survey*. Aggregates are UN/ECE secretariat calculations, using PPPs obtained from the 1996 European Comparison Programme. The figures for 1999 are based on data available at mid-October 2000.

APPENDIX TABLE A.1

Real GDP in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	2.6	3.0	3.1	4.1	3.3	3.4	1.7	1.4	0.1	2.4	2.6	1.9	2.8	2.7	2.0
4 major countries	2.5	2.8	2.7	4.3	3.3	3.1	1.9	1.3	-0.3	2.7	2.2	1.3	2.1	2.3	2.0
France [a]	1.5	2.4	2.5	4.6	4.2	2.6	1.0	1.5	-0.9	2.1	1.7	1.1	1.9	3.1	2.9
Germany [b]	2.0	2.3	1.5	3.7	3.6	5.7	5.1	2.2	-1.1	2.3	1.7	0.8	1.4	2.1	1.6
Italy	3.0	2.5	3.0	3.9	2.9	2.0	1.4	0.8	-0.9	2.2	2.9	1.1	1.8	1.5	1.4
United Kingdom	3.8	4.2	4.4	5.2	2.1	0.7	-1.5	0.1	2.3	4.4	2.8	2.6	3.5	2.6	2.1
17 smaller countries	2.8	3.3	3.9	3.6	3.5	4.0	1.5	1.6	0.7	1.8	3.4	3.1	4.1	3.5	2.2
Austria	2.2	2.3	1.7	3.2	4.2	4.6	3.4	1.3	0.5	2.4	1.7	2.0	1.2	2.9	2.1
Belgium	1.0	1.8	2.7	4.6	3.6	2.8	1.9	1.6	-1.5	3.0	2.6	1.2	3.4	2.4	2.7
Cyprus	4.7	3.8	7.0	8.5	7.9	7.4	0.6	9.7	0.7	5.9	6.1	1.9	2.4	5.0	4.5
Denmark	3.9	4.0	-0.3	0.8	0.2	1.0	1.1	0.6	–	5.5	2.8	2.5	3.1	2.5	1.7
Finland	3.1	2.5	4.2	4.7	5.1	–	-6.3	-3.3	-1.1	4.0	3.8	4.0	6.3	5.5	4.0
Greece	3.1	1.6	-0.5	4.5	3.8	–	3.1	0.7	-1.6	2.0	2.1	2.4	3.4	3.7	3.2
Iceland	3.3	6.3	8.5	-0.1	0.3	1.2	1.1	-3.3	1.0	3.7	1.0	5.6	5.3	4.7	4.4
Ireland	3.1	-0.4	4.7	5.2	5.8	8.5	1.9	3.3	2.7	5.8	9.7	7.7	10.7	8.6	9.8
Israel [a]	3.6	3.6	6.2	3.4	1.4	6.3	5.7	6.8	3.4	6.9	8.3	4.6	2.9	2.2	2.3
Luxembourg	2.9	7.8	2.3	10.4	9.8	2.2	6.1	4.5	8.7	4.2	3.8	2.9	7.3	5.0	4.9
Malta	2.6	3.9	4.1	8.4	8.2	6.3	6.3	4.7	4.5	5.7	6.2	4.0	4.9	3.4	4.2
Netherlands	3.1	2.8	1.4	2.6	4.7	4.1	2.3	2.0	0.8	3.2	2.3	3.0	3.8	4.1	3.9
Norway [a]	5.2	3.6	2.0	-0.1	0.9	2.0	3.1	3.3	2.7	5.5	3.8	4.9	4.7	2.0	0.9
Portugal	2.8	4.1	6.4	7.5	5.4	4.8	2.4	1.9	-1.4	2.5	3.7	3.6	3.7	3.5	3.0
Spain	1.7	3.2	5.6	5.2	4.7	3.7	2.3	0.7	-1.2	2.3	2.7	2.4	3.9	4.3	4.0
Sweden	1.9	2.3	3.1	2.3	2.4	1.4	-1.1	-1.4	-2.2	4.1	3.7	1.1	2.0	3.0	3.8
Switzerland	3.4	1.6	0.7	3.1	4.3	3.7	-0.8	-0.1	-0.5	0.5	0.5	0.3	1.7	2.1	1.5
Turkey	4.2	7.0	9.5	2.1	0.3	9.3	0.9	6.0	8.0	-5.5	7.2	7.0	7.5	3.1	-5.0
North America	4.0	3.4	3.5	4.2	3.4	1.6	-0.6	2.9	2.6	4.1	2.7	3.4	4.4	4.3	4.3
Canada	5.4	2.6	4.1	4.9	2.5	0.3	-1.9	0.9	2.3	4.7	2.8	1.5	4.4	3.3	4.5
United States [a]	3.8	3.4	3.4	4.2	3.5	1.8	-0.5	3.0	2.7	4.0	2.7	3.6	4.4	4.4	4.2
Total above	3.3	3.2	3.3	4.1	3.4	2.5	0.6	2.1	1.4	3.3	2.7	2.7	3.6	3.5	3.1
Japan	4.4	2.9	4.2	6.2	4.8	5.1	3.8	1.0	0.3	0.6	1.5	5.0	1.6	-2.5	0.2
Total above, *including Japan*	3.5	3.1	3.4	4.5	3.6	2.9	1.1	2.0	1.2	2.8	2.5	3.0	3.3	2.6	2.7
Memorandum items:															
European Union [c]	2.4	2.8	2.9	4.2	3.5	3.1	1.8	1.2	-0.4	2.8	2.4	1.7	2.5	2.7	2.4
Euro area	2.1	2.5	2.7	4.2	3.9	3.8	2.6	1.5	-0.8	2.4	2.3	1.5	2.3	2.7	2.4

Source: Eurostat; OECD; national statistics.

Note: All aggregates exclude Israel. Growth rates of regional aggregates have been calculated as weighted averages of growth rates in individual countries. Weights were derived from 1996 GDP data converted from national currency units into dollars using 1996 purchasing power parities. 1993 SNA/ESA95 definitions except for Iceland, Japan, Malta, Switzerland and Turkey.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Fifteen countries.

APPENDIX TABLE A.2

Real private consumption expenditure in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	2.4	4.1	3.5	3.7	3.1	3.4	2.3	1.7	–	1.4	2.0	2.3	2.4	3.0	2.7
4 major countries	2.5	4.3	3.8	4.1	3.2	3.0	2.3	1.7	-0.2	1.6	1.7	1.7	1.8	2.8	2.7
France [a]	1.6	3.6	3.0	2.7	3.0	2.7	0.7	0.9	-0.4	1.2	1.2	1.3	0.2	3.3	2.1
Germany [b]	1.7	3.5	3.4	2.7	2.8	5.4	5.6	2.7	0.1	1.0	2.0	1.0	0.7	2.0	2.6
Italy	3.1	4.0	3.8	4.0	3.7	2.1	2.9	1.9	-3.7	1.5	1.7	1.2	3.0	2.3	1.7
United Kingdom	3.9	6.6	5.3	7.5	3.2	0.7	-1.7	0.5	2.9	2.9	1.7	3.6	3.9	4.0	4.3
17 smaller countries	2.3	3.7	2.8	2.9	3.1	4.1	2.4	1.9	0.6	1.1	2.5	3.5	3.5	3.4	2.7
Austria	1.9	2.2	2.9	3.3	3.7	3.8	2.8	3.0	0.7	1.8	2.9	3.2	0.1	1.5	2.7
Belgium	2.0	3.1	1.8	3.7	3.9	3.2	3.0	2.2	-1.0	2.0	1.0	0.7	2.1	3.3	1.9
Cyprus	5.9	1.7	5.5	10.5	6.9	9.0	9.9	3.2	-4.8	5.0	10.3	3.5	4.0	9.1	2.0
Denmark	4.1	5.9	-2.2	-0.7	-0.1	0.1	1.6	1.9	0.5	6.5	1.2	2.5	3.7	3.5	0.6
Finland	3.8	4.0	5.1	5.3	4.6	-0.6	-3.8	-4.4	-3.1	2.6	4.4	4.2	3.5	4.9	3.6
Greece	3.9	0.7	1.2	3.6	6.1	2.6	2.8	2.4	-0.8	2.0	2.8	2.1	3.1	2.2	2.6
Iceland	4.2	6.9	16.2	-3.8	-4.2	0.5	4.1	-4.5	-4.5	1.9	4.2	6.4	6.0	11.0	7.2
Ireland	4.6	2.0	3.3	4.5	6.5	1.4	1.8	2.9	2.9	4.4	4.1	6.4	7.5	7.8	7.8
Israel [a]	0.7	15.1	8.9	4.5	0.4	5.6	7.2	8.0	7.3	9.5	5.8	5.4	4.2	3.6	3.4
Luxembourg	2.7	5.7	4.6	4.6	5.1	5.7	6.3	-0.9	1.7	2.4	2.4	4.4	3.8	2.3	3.0
Malta	5.0	1.4	0.5	9.0	9.2	3.8	3.8	4.3	0.8	2.3	10.5	7.1	1.6	2.2	6.3
Netherlands	2.8	2.6	2.7	0.8	3.5	4.2	3.1	2.5	1.0	2.2	2.0	4.0	3.0	4.4	4.4
Norway [a]	9.4	5.0	-0.8	-2.0	-0.6	0.7	1.5	2.2	2.2	4.0	3.4	5.3	3.6	3.3	2.4
Portugal	0.7	5.6	5.3	6.9	3.1	6.0	3.6	3.6	0.9	2.2	5.3	3.9	3.1	5.7	4.7
Spain	2.0	3.3	5.8	4.9	5.7	3.6	2.9	2.2	-2.2	0.9	1.6	2.2	3.1	4.5	4.7
Sweden	2.7	4.4	4.6	2.4	1.2	-0.4	0.9	-1.4	-3.1	1.8	0.6	1.4	1.7	2.4	4.1
Switzerland	1.6	2.3	2.2	1.7	2.3	1.2	1.6	0.1	-0.9	1.0	0.6	0.7	1.3	2.3	2.2
Turkey	-0.6	5.8	-0.3	1.2	-1.0	13.1	2.7	3.2	8.6	-5.4	4.8	8.5	8.4	0.6	-3.1
North America	5.0	4.2	3.4	4.1	2.7	1.8	-0.3	2.8	3.2	3.7	2.9	3.1	3.6	4.6	5.1
Canada	5.2	4.0	4.1	4.4	3.6	1.3	-1.4	1.8	1.8	3.1	2.1	2.5	4.4	2.9	3.5
United States [a]	5.0	4.2	3.3	4.0	2.7	1.8	-0.2	2.9	3.4	3.8	3.0	3.2	3.6	4.7	5.3
Total above	3.7	4.1	3.4	3.9	2.9	2.6	1.0	2.3	1.6	2.6	2.5	2.7	3.0	3.8	3.9
Japan	3.3	3.5	4.2	5.3	4.8	4.4	2.5	2.1	1.2	1.9	2.1	2.9	0.5	-0.5	1.2
Total above, *including Japan*	3.6	4.0	3.6	4.1	3.2	2.9	1.3	2.2	1.6	2.5	2.4	2.8	2.6	3.1	3.5
Memorandum items:															
European Union [c]	2.5	4.0	3.7	3.9	3.4	3.0	2.3	1.7	-0.4	1.7	1.8	2.0	2.1	3.1	3.0
Euro area	2.1	3.5	3.6	3.3	3.5	3.6	3.2	2.0	-1.0	1.4	1.9	1.6	1.7	3.0	2.7

Source: Eurostat; OECD; national statistics.

Note: See appendix table A.1.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Fifteen countries.

APPENDIX TABLE A.3

Real general government consumption expenditure in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	2.9	2.9	2.9	2.2	1.2	3.0	2.4	2.5	1.4	0.7	1.0	1.9	0.8	1.6	1.8
4 major countries	1.8	2.3	2.1	2.3	–	2.4	1.8	2.7	0.8	1.1	0.3	1.7	0.1	0.6	1.3
France [a]	2.2	2.4	2.2	3.2	1.6	2.5	2.7	3.8	4.6	0.7	-0.1	2.3	2.1	0.1	2.6
Germany [b]	2.1	2.5	1.5	2.1	-1.6	2.2	0.4	5.0	0.1	2.4	1.5	1.8	-0.9	0.5	-0.1
Italy	3.0	2.6	4.8	4.0	0.2	2.5	1.7	0.6	-0.2	-0.9	-2.2	1.0	0.8	0.7	0.6
United Kingdom	-0.1	1.6	–	–	0.8	2.5	2.9	0.5	-0.8	1.4	1.6	1.7	-1.4	1.1	3.0
17 smaller countries	5.1	4.0	4.5	2.0	3.5	4.1	3.5	2.1	2.3	–	2.2	2.4	2.2	3.4	2.8
Austria	1.3	1.8	0.2	1.1	1.4	1.3	2.2	2.0	2.7	2.5	–	1.3	-0.4	2.0	1.0
Belgium	2.5	1.3	2.7	-0.7	1.1	-0.3	3.6	1.5	-0.1	1.4	1.2	2.4	0.1	1.4	3.4
Cyprus	3.7	3.6	5.3	10.5	1.9	17.4	3.9	13.8	-14.3	4.1	2.9	11.7	3.7	6.4	-3.6
Denmark	2.1	0.9	2.1	-0.2	-0.8	-0.2	0.6	0.8	4.1	3.0	2.1	3.4	1.3	3.0	1.4
Finland	4.3	3.4	4.4	1.9	2.2	4.0	2.1	-2.4	-4.2	0.3	2.0	2.5	4.1	1.7	2.0
Greece	3.2	-0.8	0.9	5.7	5.5	0.6	-1.5	-3.1	2.6	-1.1	5.7	0.9	1.7	2.1	0.5
Iceland	6.5	7.3	6.5	4.7	3.0	4.4	3.2	-0.8	2.3	3.7	1.3	1.0	3.1	3.6	4.7
Ireland	1.8	2.6	-4.8	-5.0	-1.3	5.4	2.7	3.0	0.1	4.1	3.8	3.2	5.6	5.3	5.2
Israel [a]	2.9	-9.7	18.3	-2.5	-8.6	7.7	4.1	1.4	4.2	-0.2	1.8	5.1	1.9	2.0	2.9
Luxembourg	2.0	2.7	4.7	4.9	3.9	3.1	3.9	1.5	3.7	2.0	2.2	4.4	2.1	2.8	3.3
Malta	5.6	4.4	9.1	6.0	12.7	5.7	10.9	8.9	6.0	6.4	8.5	8.4	-1.1	-4.0	-1.1
Netherlands	2.4	3.6	2.6	1.4	1.5	1.6	1.5	1.7	1.5	0.6	0.8	-0.4	3.2	3.4	2.5
Norway [a]	2.3	1.9	4.6	-0.1	1.9	4.9	4.3	5.3	2.2	1.4	0.3	2.8	1.9	3.8	2.7
Portugal	6.4	7.2	3.8	8.6	6.6	5.4	10.3	1.1	0.9	2.1	2.7	-0.3	2.6	3.4	3.4
Spain	6.0	5.4	8.9	4.0	8.3	6.6	5.6	4.0	2.4	-0.3	1.8	1.3	2.9	3.7	2.9
Sweden	2.2	1.3	1.0	0.6	2.1	2.6	2.8	–	0.2	-0.9	-0.6	0.9	-1.0	2.2	1.8
Switzerland	3.4	3.4	1.7	4.5	5.4	5.4	3.5	0.7	-0.1	2.0	-0.1	2.0	0.6	-0.2	-0.4
Turkey	14.1	9.2	9.4	-1.1	0.8	8.0	3.7	3.6	8.6	-5.5	6.8	8.6	4.1	7.8	6.5
North America	6.3	5.1	2.8	1.5	2.8	3.3	1.3	0.5	-0.7	–	0.4	0.9	2.1	2.1	3.2
Canada	4.3	1.9	1.4	4.6	2.8	3.7	2.8	1.0	0.1	-1.2	-0.5	-1.4	-1.2	1.6	1.3
United States [a c]	6.4	5.4	3.0	1.2	2.8	3.3	1.2	0.5	-0.8	0.1	0.4	1.1	2.4	2.1	3.3
Total above	4.6	4.0	2.9	1.8	2.0	3.2	1.8	1.5	0.3	0.3	0.7	1.4	1.4	1.8	2.5
Japan	0.3	5.1	1.6	2.3	2.0	1.5	2.0	2.0	2.4	2.4	3.3	1.9	1.5	1.5	1.3
Total above, *including Japan*	3.9	4.2	2.7	1.9	2.0	2.9	1.9	1.6	0.6	0.7	1.1	1.5	1.4	1.8	2.3
Memorandum items:															
European Union [d]	2.4	2.6	2.6	2.3	1.1	2.6	2.3	2.4	1.0	1.0	0.7	1.6	0.6	1.2	1.6
Euro area	2.8	2.9	3.2	2.8	1.1	2.8	2.2	3.1	1.3	0.9	0.4	1.5	1.0	1.2	1.4

Source: Eurostat; OECD; national statistics.

Note: See appendix table A.1.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Includes final consumption expenditure and gross investment.

[d] Fifteen countries.

APPENDIX TABLE A.4

Real gross domestic fixed capital formation in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	2.8	4.4	7.2	8.1	6.4	4.5	-0.3	-0.2	-4.0	1.8	3.6	3.0	3.9	5.7	4.2
4 major countries	1.5	3.4	4.8	8.3	6.0	4.0	–	0.7	-5.2	2.5	2.2	1.6	2.1	5.5	5.0
France [a]	3.1	6.0	6.0	9.5	7.3	3.3	-1.5	-1.6	-6.4	1.5	2.0	–	-0.1	6.3	7.1
Germany [b]	-0.5	3.3	1.8	4.4	6.3	8.5	6.0	4.5	-4.5	4.0	-0.7	-0.8	0.6	3.0	3.3
Italy	0.4	2.3	4.2	6.7	4.2	4.0	1.0	-1.4	-10.9	0.1	6.0	3.6	1.2	4.1	4.4
United Kingdom	4.0	2.1	8.9	14.8	5.9	-2.3	-8.7	-0.7	0.8	3.6	2.9	4.9	7.5	10.1	6.1
17 smaller countries	5.4	6.2	11.8	7.6	7.3	5.5	-0.7	-1.7	-1.7	0.7	6.2	5.5	7.5	5.9	2.7
Austria	6.9	2.4	4.4	6.8	6.3	6.6	6.3	0.1	-2.0	8.4	1.2	2.1	0.8	6.8	2.9
Belgium	3.9	3.2	6.2	15.7	12.6	8.5	-4.1	1.7	-3.1	-0.1	4.9	0.8	6.7	4.6	4.8
Cyprus	-7.7	-7.1	4.5	10.6	20.0	-2.8	-1.6	16.2	-12.8	-2.5	-1.7	7.4	-4.5	2.4	-0.1
Denmark	14.3	16.5	-0.8	-3.0	-0.8	-2.1	-3.3	-2.0	-4.0	7.6	11.6	4.0	8.0	6.7	0.3
Finland	2.8	1.0	4.9	11.0	13.0	-4.6	-18.6	-16.7	-16.6	-2.7	10.6	8.4	11.9	9.4	4.6
Greece	5.2	-6.2	-5.1	8.9	7.1	5.0	4.8	-3.2	-3.5	-2.7	4.2	8.4	13.2	8.0	7.1
Iceland	1.0	-1.6	18.8	-0.2	-7.9	3.0	2.0	-11.3	-11.4	-1.1	-2.8	26.5	10.5	25.9	-2.0
Ireland	-7.7	-2.8	-1.1	5.2	10.1	13.4	-7.0	–	-5.1	11.8	13.3	16.5	17.8	14.7	12.5
Israel [a]	-9.2	7.4	6.1	1.6	-2.2	25.3	41.9	5.2	5.3	8.4	6.6	7.7	-2.4	-4.0	0.6
Luxembourg	-9.5	31.0	17.9	15.0	7.0	2.7	31.6	-9.0	28.4	-14.9	3.5	-3.5	10.5	1.5	9.0
Malta	-4.0	-8.7	30.7	6.1	1.0	17.9	–	-0.2	11.1	8.5	17.8	-8.4	-4.5	-3.4	0.8
Netherlands	7.0	6.9	0.9	4.5	4.9	1.6	0.2	0.6	-2.8	2.2	4.8	6.3	6.6	4.1	6.5
Norway [a]	-4.0	7.6	0.3	-1.8	-6.9	-10.8	-0.4	-3.1	4.3	4.5	3.4	9.9	13.9	5.8	-5.6
Portugal	-3.5	10.9	18.0	14.8	4.2	8.2	3.5	4.8	-5.8	3.5	-4.0	6.2	10.6	8.8	6.5
Spain	6.1	9.9	14.0	13.9	13.6	6.6	1.6	-4.4	-10.5	2.5	8.2	2.1	5.0	9.7	8.9
Sweden	5.2	0.3	8.2	6.6	11.3	1.3	-8.9	-10.8	-17.2	6.1	9.4	5.0	-2.2	9.4	8.1
Switzerland	2.8	5.4	4.0	8.1	5.3	3.8	-2.9	-6.6	-2.7	6.5	1.8	-2.4	1.5	4.4	1.8
Turkey	11.5	8.4	45.1	-1.0	2.2	15.9	0.4	6.4	26.4	-16.0	9.1	14.1	14.8	-3.9	-16.0
North America	..	..	..	4.2	3.0	-2.0	-6.7	5.8	7.2	9.0	5.4	9.0	10.0	11.1	9.2
Canada	10.3	5.4	10.7	9.8	5.9	-3.6	-3.5	-1.3	-2.7	7.4	-1.9	5.8	15.4	3.4	10.1
United States [a c]	..	..	..	3.6	2.7	-1.8	-6.9	6.5	8.1	9.1	6.1	9.3	9.6	11.8	9.2
Total above	..	..	..	6.1	4.7	1.3	-3.5	2.8	1.6	5.4	4.5	6.0	7.0	8.4	6.7
Japan	5.0	4.8	9.1	11.5	8.2	8.5	3.3	-1.5	-2.0	-0.8	1.7	11.1	-0.8	-7.4	-1.0
Total above, *including Japan*	..	..	..	7.0	5.3	2.4	-2.4	2.1	1.0	4.4	4.1	6.8	5.8	5.9	5.5
Memorandum items:															
European Union [d]	2.5	4.2	5.5	8.7	6.9	4.2	-0.2	-0.3	-5.7	2.6	3.4	2.4	3.3	6.2	5.5
Euro area	1.8	4.6	5.1	7.8	7.1	5.7	1.7	0.2	-6.7	2.3	3.1	1.6	2.3	5.2	5.3

Source: Eurostat; OECD; national statistics.

Note: See appendix table A.1.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Includes only gross domestic fixed investment of the private sector; the government sector gross investment is included in the final consumption expenditure of general government.

[d] Fifteen countries.

APPENDIX TABLE A.5

Real total domestic demand in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	2.4	3.9	3.9	4.4	3.5	3.6	1.4	1.4	-0.8	1.8	2.6	1.7	2.6	3.6	2.6
4 major countries	2.2	3.7	3.6	4.9	3.1	2.9	1.6	1.5	-1.4	2.3	1.8	1.1	1.7	3.3	2.7
France [a]	2.1	3.7	3.2	4.6	3.7	2.9	0.5	0.8	-1.6	2.1	1.6	0.7	0.7	3.7	2.7
Germany [b]	1.0	3.3	2.4	3.6	2.9	5.2	4.7	2.8	-1.1	2.3	1.7	0.3	0.6	2.4	2.4
Italy	3.2	3.1	4.3	4.1	3.1	2.7	2.1	0.9	-5.1	1.7	2.0	0.9	2.5	2.9	2.5
United Kingdom	3.0	4.7	4.9	8.0	2.8	-0.3	-2.7	0.8	2.2	3.4	1.8	3.0	3.8	4.6	3.6
17 smaller countries	2.9	4.4	4.5	3.6	4.3	4.8	1.1	1.1	0.3	0.7	4.1	3.0	4.2	4.1	2.4
Austria	1.9	2.1	2.6	3.2	3.0	4.3	3.6	1.4	0.8	3.6	1.9	2.0	0.5	2.7	1.7
Belgium	1.0	2.6	3.5	4.8	4.3	2.9	1.7	1.8	-1.5	2.1	1.9	0.9	2.6	3.9	2.1
Cyprus	2.2	-1.5	5.6	11.3	9.7	6.3	5.1	9.3	-9.5	7.4	7.8	4.6	1.1	7.7	0.9
Denmark	5.0	6.5	-2.3	-0.2	-0.1	-0.7	-0.1	0.9	-0.3	7.0	4.2	2.2	4.4	4.3	-0.4
Finland	3.2	2.8	5.1	6.5	6.9	-1.5	-8.5	-5.8	-5.7	3.7	4.4	2.9	6.0	5.7	2.8
Greece	5.6	-1.2	-1.5	7.3	5.3	2.8	3.7	-1.7	-0.9	1.1	4.2	3.3	4.1	3.1	3.2
Iceland	2.9	4.8	15.7	-0.9	-4.3	1.4	5.1	-5.3	-4.1	1.5	3.1	7.5	6.3	12.2	4.7
Ireland	1.2	1.2	-0.2	2.1	7.3	6.4	0.2	-0.1	1.0	5.1	6.4	7.3	9.3	10.2	6.0
Israel [a]	-2.2	5.4	9.0	2.5	-2.8	9.3	12.1	5.3	6.8	5.3	6.7	5.5	1.2	0.8	5.1
Luxembourg	0.6	8.7	5.4	6.7	8.6	3.2	8.7	-1.5	9.7	-0.5	3.2	2.7	5.5	2.4	4.0
Malta	3.5	–	3.5	11.5	8.3	7.6	4.9	0.1	4.8	5.9	9.5	2.8	-0.1	-1.2	5.2
Netherlands	3.7	3.8	1.4	1.8	4.7	3.5	1.9	1.6	-1.1	3.1	2.4	2.8	3.9	4.2	4.2
Norway [a]	5.6	7.4	-0.8	-3.0	-2.0	-0.5	0.8	1.5	3.1	4.0	4.3	4.2	6.4	5.4	-1.0
Portugal	1.0	8.2	9.9	10.7	3.9	5.9	3.8	3.7	-1.4	2.9	2.9	3.0	4.7	6.0	4.8
Spain	2.5	5.4	8.1	7.0	7.8	4.8	2.9	1.0	-4.2	1.3	3.2	1.9	3.4	5.6	5.5
Sweden	3.8	2.1	4.3	2.8	3.7	0.9	-2.1	-1.8	-5.2	3.1	1.9	0.7	0.7	3.8	3.5
Switzerland	1.9	4.5	2.0	2.6	4.1	3.9	-0.6	-2.7	-1.0	2.7	1.8	0.4	1.3	4.1	1.4
Turkey	3.2	7.0	8.9	-1.3	1.5	14.6	-0.6	5.6	14.2	-12.5	11.4	7.6	9.0	0.3	-4.0
North America	4.5	3.7	3.7	3.4	3.0	1.3	-1.1	2.9	3.0	4.3	2.4	3.5	4.8	5.3	5.1
Canada	5.8	3.4	4.7	5.3	4.1	–	-1.4	0.9	1.4	3.2	1.7	1.4	6.2	2.2	4.2
United States [a]	4.4	3.8	3.7	3.2	2.9	1.4	-1.1	3.1	3.2	4.4	2.4	3.7	4.7	5.5	5.2
Total above	3.5	3.8	3.8	3.9	3.2	2.4	0.2	2.1	1.1	3.0	2.5	2.6	3.7	4.4	3.8
Japan	3.8	3.9	5.1	7.4	5.6	5.2	2.9	0.4	0.1	1.0	2.3	5.7	0.2	-3.1	0.5
Total above, *including Japan*	3.5	3.8	4.0	4.5	3.6	2.9	0.6	1.9	0.9	2.7	2.4	3.1	3.1	3.2	3.3
Memorandum items:															
European Union [c]	2.4	3.7	3.7	4.9	3.7	3.1	1.6	1.2	-1.6	2.4	2.1	1.4	2.2	3.7	3.0
Euro area	2.0	3.6	3.7	4.4	3.9	3.9	2.5	1.5	-2.3	2.2	2.1	1.1	1.8	3.5	3.0

Source: Eurostat; OECD; national statistics.

Note: See appendix table A.1.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Fifteen countries.

APPENDIX TABLE A.6

Real exports of goods and services in western Europe and North America, 1985-1999
(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	4.5	1.1	5.0	6.3	7.4	6.3	4.7	4.3	2.1	9.3	8.2	5.6	10.4	6.1	3.5
4 major countries	5.3	0.9	3.2	5.1	8.4	7.5	5.2	3.5	1.1	8.5	8.5	4.2	9.7	5.4	3.1
France [a]	2.6	-0.4	3.4	8.7	10.0	4.8	5.9	5.4	–	7.7	7.7	3.5	11.8	7.8	3.7
Germany [b]	7.6	-0.6	0.4	5.5	10.2	11.0	12.6	-0.8	-5.5	7.6	5.7	5.1	11.3	7.0	5.1
Italy	3.9	0.8	4.5	5.1	7.8	7.5	-1.4	7.3	9.0	9.8	12.6	0.6	6.5	3.3	-0.4
United Kingdom	6.0	4.5	5.9	0.6	4.8	4.9	-0.2	4.1	3.9	9.2	9.5	7.5	8.6	2.6	3.3
17 smaller countries	3.2	1.5	8.6	8.8	5.4	4.0	3.8	5.9	4.1	10.8	7.6	8.3	11.8	7.6	4.1
Austria	7.1	-2.3	3.1	10.2	11.3	7.9	5.9	1.7	-1.3	5.6	6.5	6.0	10.1	8.7	3.5
Belgium	0.3	2.8	5.0	9.6	8.3	4.6	3.1	3.7	-0.4	8.4	5.7	1.2	6.7	4.4	5.2
Cyprus	-1.1	-1.7	13.7	13.5	16.8	7.9	-8.4	18.7	-1.3	7.9	4.6	4.0	0.9	-2.4	8.2
Denmark	5.0	0.4	4.3	11.2	4.2	6.2	6.1	-0.9	-1.5	7.0	2.9	4.3	4.1	2.2	7.9
Finland	0.7	0.7	2.9	3.5	1.6	1.2	-7.3	10.3	16.7	13.1	8.6	5.8	14.1	8.9	6.3
Greece	1.3	14.0	16.0	9.0	4.6	-4.0	3.7	10.5	-3.5	6.3	0.9	3.5	7.9	4.2	6.2
Iceland	11.1	5.9	3.3	-3.6	2.9	–	-5.9	-1.9	7.1	10.0	-2.2	10.0	5.7	2.2	5.8
Ireland	6.6	2.9	13.7	9.0	10.3	8.7	5.7	13.9	9.7	15.1	20.0	12.2	17.4	21.4	12.4
Israel [a]	10.2	5.6	10.2	-1.5	4.0	2.0	-2.6	14.1	9.9	12.8	8.4	6.6	7.7	6.3	10.1
Luxembourg	9.5	3.3	4.4	11.7	8.1	3.4	6.7	4.8	2.8	4.4	4.4	4.0	10.5	9.9	5.2
Malta	7.4	7.0	12.6	6.1	10.7	13.3	7.5	9.7	5.3	7.1	5.4	-5.9	4.0	8.1	8.2
Netherlands	5.1	1.8	4.0	9.0	6.7	5.3	4.7	2.9	1.5	6.7	6.7	4.6	8.8	7.4	5.6
Norway [a]	7.2	2.2	1.1	6.4	11.0	8.6	6.1	5.2	3.2	8.7	4.3	9.3	6.1	0.3	1.7
Portugal	6.7	6.8	11.2	8.2	13.0	10.0	2.6	5.0	-3.6	8.7	13.5	7.2	8.5	7.6	5.0
Spain	2.7	1.9	6.3	5.1	3.0	3.2	7.9	7.4	8.5	16.7	10.0	10.4	15.3	8.3	6.6
Sweden	1.4	3.7	4.3	2.5	3.1	1.6	-2.3	2.3	7.6	14.1	11.3	3.5	13.0	7.3	5.2
Switzerland	8.0	-0.4	2.3	6.5	6.6	2.1	-2.1	3.0	1.5	1.8	1.6	2.5	9.0	4.6	5.9
Turkey	-1.9	-5.1	26.4	18.4	-0.3	2.5	3.7	11.0	7.7	15.2	8.0	22.0	19.1	12.0	-7.0
North America	2.9	7.2	10.6	15.5	10.9	8.4	6.2	6.3	4.0	9.3	10.2	8.0	12.0	2.8	3.5
Canada	5.5	5.2	3.3	9.5	1.3	4.7	2.3	7.9	10.9	13.1	9.0	5.9	8.8	8.9	10.0
United States [a]	2.7	7.4	11.2	16.1	11.8	8.7	6.5	6.2	3.3	8.9	10.3	8.2	12.3	2.3	2.9
Total above	3.7	4.1	7.8	10.9	9.2	7.3	5.4	5.3	3.0	9.3	9.2	6.8	11.2	4.5	3.5
Japan	5.4	-5.7	-0.5	5.9	9.1	6.9	5.2	4.9	1.3	4.6	5.4	6.3	11.6	-2.5	1.9
Total above, *including Japan*	4.0	2.6	6.5	10.1	9.1	7.3	5.4	5.3	2.8	8.5	8.6	6.7	11.3	3.4	3.2
Memorandum items:															
European Union [c]	4.7	1.4	4.1	5.7	7.7	6.5	4.9	4.0	1.8	9.2	8.4	4.8	10.1	6.0	4.0
Euro area	4.7	0.4	3.4	6.6	8.6	7.3	6.2	4.0	1.4	9.1	8.5	4.4	10.5	6.7	3.9

Source: Eurostat; OECD; national statistics.

Note: See appendix table A.1.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Fifteen countries.

APPENDIX TABLE A.7

Real imports of goods and services in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	4.3	5.2	9.1	7.8	8.6	8.0	3.7	4.1	-1.8	6.4	8.4	4.8	9.8	9.2	5.6
4 major countries	4.2	4.8	7.6	7.8	8.2	7.3	4.4	4.1	-4.4	7.3	7.0	3.3	8.6	9.3	5.9
France[a]	4.2	6.5	7.7	8.8	8.0	5.5	3.1	1.8	-3.7	8.2	8.0	1.6	6.9	11.0	3.6
Germany[b]	4.5	2.7	4.2	5.1	8.3	10.3	13.1	1.5	-5.5	7.4	5.6	3.1	8.4	8.6	8.1
Italy	5.3	4.0	12.2	5.9	8.9	11.5	2.3	7.4	-10.9	8.1	9.7	-0.3	10.2	9.1	3.4
United Kingdom	2.5	6.9	7.9	12.8	7.4	0.5	-5.0	6.8	3.2	5.4	5.5	9.1	9.2	8.8	7.6
17 smaller countries	4.5	6.1	11.9	7.7	9.5	9.2	2.4	4.1	3.3	4.8	11.1	7.5	12.1	8.9	5.0
Austria	6.2	-2.9	5.4	10.4	8.4	7.3	6.5	1.8	-0.7	8.3	7.0	5.9	9.4	6.9	1.9
Belgium	0.2	4.5	6.7	10.4	9.6	4.8	2.8	4.1	-0.4	7.2	5.0	0.8	5.7	6.5	4.5
Cyprus	-4.5	-11.0	5.5	13.4	20.4	5.8	2.2	18.2	-18.1	8.2	11.5	6.7	-0.4	4.4	-0.5
Denmark	9.7	9.5	-3.1	8.3	4.1	1.2	3.0	-0.4	-2.7	12.3	7.3	3.5	8.0	7.3	2.2
Finland	6.2	1.5	9.2	10.9	9.0	-0.8	-13.5	0.6	1.3	12.8	7.8	6.4	11.3	8.3	3.2
Greece	12.8	3.8	16.6	8.0	10.6	8.7	6.0	-2.8	0.2	1.2	9.3	7.0	9.5	1.9	5.4
Iceland	9.4	0.9	23.3	-4.6	-10.3	1.0	5.7	-8.0	-8.6	4.2	3.8	16.6	8.5	23.3	6.3
Ireland	3.2	5.6	6.2	4.9	13.5	5.1	2.4	8.2	7.5	15.5	16.4	12.5	16.8	25.8	8.7
Israel[a]	-3.7	11.2	19.6	-2.8	-5.0	9.5	16.0	8.8	14.1	10.9	4.5	8.2	1.9	1.7	14.6
Luxembourg	7.0	3.8	7.5	8.2	6.6	4.5	9.0	-0.8	2.8	-0.1	3.8	4.0	9.3	8.3	4.9
Malta	9.2	0.1	12.3	11.1	11.1	15.7	5.4	3.0	5.9	7.5	10.0	-5.9	-1.7	2.5	9.1
Netherlands	6.3	3.5	4.2	7.6	6.7	4.2	4.1	2.1	-2.1	6.7	7.5	4.4	9.5	8.0	6.3
Norway[a]	8.9	11.8	-6.5	-2.4	2.2	2.5	0.2	0.7	4.4	4.9	5.6	8.0	11.3	9.3	-3.1
Portugal	1.4	16.9	23.1	18.0	6.1	14.0	7.3	10.7	-3.3	9.0	9.1	5.0	10.6	13.8	8.5
Spain	8.0	14.4	20.1	14.4	17.3	7.8	9.0	6.9	-5.2	11.3	11.0	8.0	13.3	13.4	11.9
Sweden	6.9	4.5	7.7	5.3	7.4	0.7	-4.9	1.1	-2.5	12.2	7.2	3.0	11.8	10.4	5.0
Switzerland	3.7	8.1	6.2	5.2	5.9	2.6	-1.6	-4.2	0.1	7.9	5.1	2.7	8.1	9.4	5.5
Turkey	-6.6	-3.5	23.0	-4.5	6.9	33.0	-5.2	10.9	35.8	-21.9	29.6	20.5	22.4	2.3	-3.7
North America	6.6	8.4	6.0	4.6	4.2	3.7	-0.2	6.6	8.9	11.7	8.0	8.4	13.8	11.4	10.6
Canada	8.8	8.5	5.6	13.7	6.3	2.3	3.2	6.2	7.4	8.3	6.2	5.8	15.1	6.1	9.4
United States[a]	6.4	8.4	6.1	3.8	4.0	3.8	-0.5	6.6	9.1	12.0	8.2	8.6	13.7	11.9	10.7
Total above	5.5	6.8	7.6	6.2	6.4	5.8	1.8	5.3	3.6	9.1	8.2	6.6	11.8	10.3	8.1
Japan	-1.4	1.9	9.5	20.9	18.6	7.9	-3.1	-0.7	-0.3	8.9	14.2	11.9	0.5	-7.6	5.3
Total above, *including Japan*	4.4	6.1	7.9	8.5	8.3	6.2	1.0	4.4	3.0	9.0	9.2	7.4	10.0	7.4	7.7
Memorandum items:															
European Union[c]	4.8	5.5	8.7	8.6	8.9	6.9	4.4	4.0	-3.8	7.9	7.5	3.9	9.2	9.5	6.2
Euro area	4.9	5.3	8.9	7.9	9.3	8.5	6.5	3.8	-5.3	8.3	7.8	2.9	9.1	9.8	6.1

Source: Eurostat; OECD; national statistics.

Note: See appendix table A.1.

[a] Annual changes are calculated from chained national currency series.

[b] West Germany 1985-1991.

[c] Fifteen countries.

APPENDIX TABLE A.8

Industrial output in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	3.3	2.7	2.5	4.4	4.1	3.8	–	-0.8	-2.6	4.5	4.0	0.8	4.2	3.4	1.3
4 major countries	3.1	2.1	1.8	4.9	3.9	4.0	0.1	-1.3	-3.6	4.6	2.5	0.1	3.2	3.0	1.1
France [a]	1.4	0.6	1.2	4.6	3.7	3.3	-0.2	-1.1	-3.7	3.9	2.5	0.9	3.7	5.2	2.1
Germany [b c]	4.8	1.8	0.4	3.6	4.9	5.2	2.4	-2.3	-7.6	3.6	1.2	0.6	3.5	4.2	1.5
Italy	0.1	4.1	2.6	6.9	3.9	6.3	-0.4	-1.3	-2.1	6.2	5.0	-1.9	3.8	1.1	–
United Kingdom [c]	5.5	1.4	4.1	5.2	2.1	–	-3.3	0.4	2.1	5.2	1.8	1.0	1.0	0.8	0.5
14 smaller countries	3.5	3.9	4.0	3.5	4.6	3.4	-0.1	0.3	-0.6	4.3	7.2	2.3	6.4	4.3	1.8
Austria [d]	4.7	1.2	1.0	4.4	5.8	6.8	1.9	-1.2	-1.5	4.0	4.9	1.0	6.4	8.2	5.6
Belgium [d]	2.5	0.8	2.1	5.8	3.4	1.5	-1.9	-0.4	-5.1	2.1	6.5	0.5	4.7	3.4	0.9
Denmark [e]	4.5	7.3	-3.0	2.2	2.0	3.1	–	3.4	-2.6	10.0	4.6	2.0	5.6	2.2	2.5
Finland	2.9	1.8	5.0	3.2	3.6	-0.6	-8.7	1.3	5.6	11.3	7.2	3.6	10.2	7.0	5.8
Greece	3.3	-0.3	-1.2	5.1	1.8	-2.5	-1.0	-1.1	-2.9	1.3	1.8	1.2	1.3	7.1	3.9
Ireland [c]	3.4	2.1	8.9	10.7	11.6	4.7	3.3	9.1	5.6	11.9	20.5	7.6	14.7	15.3	10.5
Israel	..	3.6	4.9	-3.1	-1.6	8.0	6.8	8.2	6.9	7.4	8.4	5.4	1.8	2.8	1.4
Luxembourg	-1.1	1.9	-0.6	8.7	7.8	2.6	0.4	-0.8	-4.3	5.9	2.0	0.1	5.8	-0.1	11.5
Netherlands [d]	4.8	0.2	1.1	0.1	5.1	2.4	1.8	-0.2	-1.1	4.9	4.5	2.5	3.1	1.4	0.5
Norway [f]	5.7	4.1	6.6	2.9	9.3	2.5	2.5	5.6	3.6	7.0	5.9	5.4	3.4	-0.6	-0.2
Portugal [d]	-1.3	7.3	4.4	3.8	6.7	9.0	–	-2.3	-5.2	-0.2	11.6	5.3	2.6	5.7	3.0
Spain [d]	1.8	3.3	4.6	3.1	5.1	-0.3	-0.7	-3.1	-4.7	7.7	4.8	-1.3	6.9	5.5	2.6
Sweden [a g]	2.9	0.2	2.8	2.9	2.9	0.3	-5.2	-1.7	-0.4	11.5	9.8	1.0	6.5	4.6	2.1
Switzerland [d]	5.6	3.8	1.2	7.8	1.5	4.8	0.5	-1.0	-1.8	4.3	2.0	–	4.7	3.6	3.4
Turkey [a]	5.9	11.7	10.5	1.6	3.6	9.5	2.7	5.0	8.0	-6.2	12.7	7.5	10.7	1.2	-3.7
North America	1.9	1.0	4.6	4.7	1.6	-0.4	-2.1	3.0	3.5	5.6	4.8	4.2	6.2	4.1	3.6
Canada [d]	5.4	-0.6	4.4	6.1	-0.4	-2.8	-3.8	1.1	4.5	6.5	4.5	1.4	4.4	2.4	4.4
United States	1.6	1.2	4.6	4.5	1.8	-0.2	-2.0	3.1	3.4	5.5	4.9	4.4	6.4	4.2	3.6
Total above	2.6	1.9	3.5	4.5	2.9	1.8	-1.0	1.0	0.3	5.0	4.4	2.4	5.2	3.7	2.4
Japan [a]	3.7	-0.2	3.4	9.4	5.8	4.2	1.9	-5.7	-3.5	1.3	3.3	2.3	3.5	-6.5	0.8
Total above, *including Japan*	2.8	1.5	3.5	5.4	3.4	2.2	-0.5	-0.2	-0.3	4.3	4.2	2.4	4.9	1.9	2.1
Memorandum items:															
European Union	3.0	2.1	2.1	4.5	4.1	3.5	-0.2	-1.2	-3.3	5.0	3.6	0.5	3.9	3.6	1.6
Euro area	2.6	2.3	1.9	4.5	4.6	4.3	0.6	-1.5	-4.3	4.8	3.8	0.3	4.3	4.0	1.7

Source: National statistics; OECD, *Main Economic Indicators* (Paris), various issues; UN/ECE secretariat estimates.

Note: Growth rates of regional aggregates have been calculated as weighted averages of growth rates in individual countries. Weights were derived from GDP originating in industry in 1995. Data were converted from national currency units into dollars using GDP purchasing power parities.

[a] Not adjusted for unequal number of working days in the month.

[b] West Germany 1985-1991.

[c] The index measures volume of net production, i.e. gross output minus the value of input used in the production process.

[d] The index measures value added.

[e] The index is based on deflated turnover. Data cover manufacturing, mining and quarrying (excluding crude oil production and exploration).

[f] Prior to 1989 the data correspond to the physical volume of production; from 1990 the data refer to value added at factor cost.

[g] Annual figures correspond to official annual figures and differ from the average of the monthly figures. Data cover manufacturing, mining and quarrying.

APPENDIX TABLE A.9

Total employment in western Europe and North America, 1985-1999

(Percentage change over preceding year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	0.7	1.1	1.3	1.6	1.9	1.8	0.5	-1.1	-1.5	0.1	1.1	0.7	0.6	1.7	1.6
4 major countries	0.7	0.6	0.7	0.9	1.6	1.8	1.8	0.4	-1.4	-1.6	-0.2	0.5	0.3	0.6	1.1
France	-0.8	0.4	0.8	0.9	1.7	1.0	0.1	-0.5	-1.2	–	0.8	0.3	0.3	1.2	1.5
Germany [a]	0.7	1.4	0.7	0.8	1.5	3.0	2.5	-1.5	-1.4	-0.2	0.2	-0.3	-0.2	0.9	1.1
Italy	0.9	0.7	0.2	1.1	0.7	1.6	1.9	-0.5	-2.5	-1.5	-0.1	0.6	0.4	1.0	1.2
United Kingdom [b]	1.2	0.2	2.0	3.6	3.2	1.0	-3.2	-2.6	-1.3	0.6	1.1	1.0	2.0	1.2	1.0
17 smaller countries	0.8	1.7	1.8	1.7	2.1	1.8	0.7	-0.8	-1.4	0.6	2.0	1.3	0.5	2.7	2.2
Austria	0.2	0.4	–	0.6	1.3	1.6	1.4	0.2	-0.6	-0.1	–	-0.6	0.5	0.8	1.4
Belgium	0.5	0.6	0.6	1.7	1.2	0.9	0.1	-0.5	-0.8	-0.4	0.7	0.4	0.7	1.2	1.3
Cyprus [c]	3.7	1.1	3.1	4.7	3.9	2.8	0.6	4.5	-0.1	2.3	3.4	1.0	-0.2	1.2	0.8
Denmark	2.5	2.3	0.4	-0.7	-0.7	-0.7	-0.6	-0.8	-1.5	1.4	0.5	0.7	1.0	2.0	1.1
Finland	1.0	-0.3	0.5	1.0	0.9	-0.5	-5.6	-7.2	-6.3	-1.1	1.6	1.4	3.3	2.1	2.2
Greece	1.0	0.4	-0.1	1.6	0.4	1.3	-2.3	1.5	0.9	1.9	0.9	-0.4	-0.3	3.4	1.2
Iceland [c]	3.6	3.1	6.0	-3.0	-1.5	-1.1	-0.1	-1.4	-0.8	0.5	0.9	2.3	1.8	3.4	2.7
Ireland	-2.5	0.5	0.6	0.3	-0.1	3.3	-0.1	3.1	1.5	3.2	5.4	3.8	5.6	5.0	5.1
Israel	0.7	1.4	2.6	3.5	0.5	2.1	6.1	4.2	6.1	6.9	5.2	2.4	1.4	1.6	3.1
Luxembourg	1.4	2.5	2.1	3.0	3.5	4.1	4.1	2.5	1.7	2.6	2.6	2.7	3.1	4.4.	5.0
Malta [d]	1.3	2.1	5.9	2.5	0.9	0.8	2.5	1.0	0.5	-1.3	3.3	1.0	0.5	0.4	0.6
Netherlands	1.3	2.5	1.6	2.3	1.8	3.0	2.6	1.6	0.7	-0.1	2.4	2.3	3.2	3.3	2.8
Norway	2.7	3.3	2.1	-0.4	-2.8	-0.8	-0.8	-0.3	0.2	1.3	2.1	2.1	2.9	2.4	0.6
Portugal	-0.5	2.7	2.3	2.2	1.9	1.7	2.8	-1.6	-2.0	-1.0	-0.2	1.6	1.7	2.7	1.8
Spain	-0.9	2.2	3.1	2.9	4.1	2.6	0.2	-1.9	-4.3	-0.9	1.8	1.2	2.8	3.7	3.5
Sweden	1.0	0.6	0.8	1.4	1.5	0.9	-1.5	-4.4	-5.1	-0.8	1.4	-0.6	-0.6	1.2	2.4
Switzerland	2.0	2.3	2.5	2.6	2.7	3.2	1.8	-1.6	-0.7	-0.3	0.3	0.3	-0.3	1.2	0.6
Turkey	1.7	1.9	2.3	1.5	2.6	1.7	1.7	0.2	0.2	2.8	3.7	2.0	-2.5	2.8	2.2
North America	2.4	1.8	2.9	3.0	2.5	1.0	-1.2	-0.2	1.9	2.5	2.5	1.7	2.4	2.3	2.0
Canada	2.8	3.1	2.8	3.2	2.2	0.8	-1.8	-0.7	0.8	2.0	1.9	0.8	2.3	2.6	2.8
United States [c]	2.4	1.7	2.9	2.9	2.5	1.1	-1.1	-0.1	2.1	2.6	2.5	1.9	2.4	2.3	1.9
Total above	1.4	1.4	1.9	2.2	2.1	1.5	-0.2	-0.7	-0.1	1.1	1.7	1.2	1.3	2.0	1.8
Japan	0.6	0.5	0.4	1.2	1.5	1.7	2.0	1.1	0.4	0.1	0.2	0.5	1.1	-0.7	-0.8
Total above, *including Japan*	1.2	1.2	1.7	2.0	2.0	1.5	0.2	-0.4	–	0.9	1.4	1.0	1.3	1.5	1.4
Memorandum items:															
European Union [e]	0.5	1.0	1.1	1.6	1.8	1.8	0.4	-1.3	-1.8	-0.2	0.8	0.5	1.0	1.6	1.6
Euro area	0.2	1.1	1.0	1.3	1.7	2.1	1.4	-1.0	-1.8	-0.5	0.6	0.5	0.8	1.6	1.7

Source: Eurostat; OECD; national statistics.

Note: Total employment according to national account concept, while labour force survey concept is used for Canada, Israel, Turkey, United Kingdom; Austria (up to 1987); Portugal (up to 1990); Ireland, Netherlands, Spain (up to 1994). All aggregates exclude Israel.

[a] West Germany 1985-1991.

[b] Number of jobs.

[c] Full-time equivalent.

[d] Full-time occupied at the end of the year.

[e] Fifteen countries.

APPENDIX TABLE A.10

Standardized unemployment rates[a] in western Europe and North America, 1985-1999

(Per cent of civilian labour force)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	9.4	9.4	9.3	8.8	8.1	7.6	7.7	8.4	10.1	10.5	10.0	10.0	9.9	9.4	8.8
4 major countries	9.3	9.3	9.2	8.6	7.9	7.3	7.4	8.0	9.8	10.1	9.8	10.0	10.1	9.7	9.2
France	10.2	10.3	10.5	10.0	9.4	9.0	9.5	10.4	11.7	12.3	11.7	12.4	12.3	11.8	11.3
Germany[b]	7.2	6.5	6.3	6.2	5.6	4.8	4.2	4.5	7.9	8.5	8.2	8.9	9.9	9.4	8.8
Italy	8.3	9.0	9.8	9.8	9.8	9.0	8.6	8.9	10.2	11.2	11.6	11.7	11.7	11.9	11.4
United Kingdom	11.5	11.6	10.6	8.7	7.3	7.1	8.9	10.0	10.5	9.6	8.7	8.2	7.0	6.3	6.1
17 smaller countries	9.6	9.5	9.4	9.0	8.5	8.0	8.2	9.1	10.6	11.2	10.4	10.1	9.6	9.0	8.3
Austria	3.6	3.1	3.8	3.6	3.1	3.2	3.5	3.6	4.0	3.8	3.9	4.4	4.4	4.5	3.8
Belgium	10.4	10.3	10.1	9.0	7.5	6.7	6.6	7.2	8.8	10.0	9.9	9.7	9.4	9.5	9.1
Cyprus[c]	3.3	3.7	3.4	2.8	2.3	1.8	3.0	1.8	2.6	2.7	2.6	3.1	3.4	3.3	3.8
Denmark	7.1	5.4	5.4	6.1	7.3	7.7	8.4	9.2	10.2	8.2	7.3	6.8	5.6	5.2	5.2
Finland	6.1	6.7	4.9	4.2	3.1	3.2	6.7	11.6	16.4	16.7	15.2	14.5	12.6	11.4	10.2
Greece	7.0	6.6	6.7	6.8	6.7	6.4	7.0	7.9	8.6	8.9	9.2	9.6	9.8	10.9	11.7
Iceland	0.9	0.6	0.5	0.6	1.6	1.8	2.6	4.3	5.3	5.4	4.9	3.8	3.9	2.7	2.1
Ireland	16.8	16.8	16.6	16.2	14.7	13.4	14.8	15.4	15.6	14.4	12.3	11.7	9.9	7.6	5.7
Israel[d]	6.7	7.1	6.1	6.4	8.9	9.6	10.6	11.2	10.0	7.8	6.9	6.7	7.7	8.5	8.9
Luxembourg	2.9	2.6	2.5	2.0	1.8	1.7	1.7	2.1	2.7	3.2	2.9	3.0	2.8	2.7	2.4
Malta[e]	8.1	6.9	4.4	4.0	3.7	3.8	3.6	4.0	4.5	4.1	3.8	4.4	5.0	5.1	5.3
Netherlands	8.3	8.3	8.1	7.6	6.9	6.2	5.8	5.6	6.6	7.1	6.9	6.3	5.2	4.1	3.3
Norway	2.7	2.0	2.1	3.2	5.0	5.3	5.6	6.0	6.1	5.5	5.0	4.9	4.1	3.3	3.3
Portugal	9.2	8.8	7.3	5.9	5.2	4.8	4.2	4.3	5.7	7.0	7.3	7.3	6.8	5.2	4.5
Spain	21.6	21.2	20.6	19.5	17.2	16.3	16.4	18.4	22.7	24.1	22.9	22.2	20.8	18.8	15.9
Sweden	2.9	2.7	2.2	1.8	1.6	1.7	3.1	5.6	9.1	9.4	8.8	9.6	9.9	8.3	7.2
Switzerland	0.9	0.8	0.7	0.6	0.5	0.5	2.0	3.1	4.0	3.8	3.5	3.9	4.2	3.5	3.1
Turkey[d]	7.1	7.9	8.3	8.4	8.7	8.2	7.9	7.9	7.6	8.1	6.9	6.1	6.4	6.8	7.6
North America	7.6	7.3	6.5	5.7	5.5	5.9	7.2	7.9	7.4	6.5	6.0	5.8	5.4	4.9	4.6
Canada	10.7	9.6	8.8	7.8	7.6	8.1	10.3	11.2	11.4	10.4	9.4	9.6	9.1	8.3	7.6
United States	7.2	7.0	6.2	5.5	5.3	5.6	6.8	7.5	6.9	6.1	5.6	5.4	4.9	4.5	4.2
Total above	8.6	8.5	8.1	7.5	7.0	6.8	7.5	8.2	9.0	8.8	8.3	8.2	7.9	7.4	7.0
Japan	2.6	2.8	2.9	2.5	2.3	2.1	2.1	2.2	2.5	2.9	3.2	3.4	3.4	4.1	4.7
Total above, *including Japan*	7.6	7.5	7.2	6.6	6.2	6.1	6.6	7.2	7.9	7.8	7.5	7.4	7.2	6.9	6.6
Memorandum items:															
European Union[f]	10.0	9.9	9.7	9.1	8.3	7.7	7.9	8.7	10.7	11.1	10.7	10.8	10.6	9.9	9.2
Euro area	10.1	10.0	10.0	9.6	8.9	8.2	7.8	8.5	10.9	11.6	11.3	11.5	11.5	10.9	10.0

Source: Eurostat; OECD; national statistics.

Note: All aggregates exclude Israel. Comparisons with previous years are limited by changes in methodology in Austria (1993), Finland (1984), Iceland (1991), Israel (1995), Norway (1989), Portugal (1983), Switzerland (1991) and the United States (1994).

[a] Eurostat-OECD definition except for Austria (1982-1992), Cyprus, Finland (1982-1983), Iceland (1982-1990), Israel, Malta, Switzerland (1982-1990) and Turkey.

[b] West Germany 1982-1990.

[c] Registered unemployment rate, average of monthly data.

[d] Definitions comply with ILO guidelines but do not follow the Eurostat-OECD standards.

[e] Registered unemployment rate at the end of the year.

[f] Fifteen countries.

APPENDIX TABLE A.11

Consumer prices in western Europe and North America, 1985-1999

(Percentage change over previous year)

	1985	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Western Europe	6.1	3.6	3.3	3.6	5.1	5.6	5.1	4.5	3.6	3.0	3.0	2.4	2.0	1.7	1.3
4 major countries	5.5	2.6	2.8	3.2	4.9	5.2	4.6	4.2	3.3	2.7	2.9	2.4	2.0	1.6	1.2
France	5.8	2.7	3.1	2.7	3.6	3.3	3.2	2.4	2.1	1.7	1.7	2.0	1.2	0.7	0.5
Germany [a]	2.2	-0.2	0.3	1.2	2.8	2.7	3.6	5.1	4.5	2.7	1.8	1.5	1.8	0.9	0.6
Italy	9.2	5.8	4.8	5.1	6.3	6.5	6.3	5.3	4.6	4.1	5.2	3.9	1.7	1.8	2.2
United Kingdom	6.1	3.4	4.1	4.9	7.8	9.5	5.9	3.7	1.6	2.4	3.5	2.4	3.1	3.4	1.5
16 smaller countries	7.5	5.9	4.4	4.4	5.6	6.6	6.1	5.1	4.4	3.6	3.3	2.6	2.0	1.7	1.8
Austria	3.2	1.7	1.4	2.0	2.5	3.2	3.4	4.0	3.7	3.0	2.2	1.9	1.3	0.9	0.6
Belgium	4.9	1.3	1.5	1.1	3.2	3.4	3.2	2.4	2.8	2.4	1.5	2.0	1.6	1.0	1.1
Cyprus	5.1	1.2	2.8	3.4	3.8	4.5	5.0	6.5	4.9	4.7	2.6	2.9	3.6	2.2	1.7
Denmark	4.7	3.6	4.0	4.6	4.8	2.7	2.4	2.1	1.3	2.0	2.1	2.0	2.2	1.9	2.5
Finland	5.9	2.9	4.1	5.1	6.6	6.2	4.3	3.0	2.1	1.1	1.0	0.6	1.2	1.4	1.2
Greece	19.3	23.0	16.4	13.5	13.7	20.4	19.5	15.9	14.4	10.7	8.8	8.3	5.5	4.8	2.6
Iceland	32.6	22.7	18.8	19.1	20.8	15.4	6.8	3.7	4.1	1.5	1.7	2.3	1.8	1.7	3.4
Ireland	5.4	3.8	3.1	2.1	4.1	3.3	3.2	3.1	1.4	2.4	2.5	1.7	1.4	2.4	1.6
Israel	304.6	48.1	19.9	16.3	20.2	17.2	19.0	12.0	11.0	12.3	10.1	11.3	9.0	5.4	5.2
Luxembourg	4.1	0.3	-0.1	1.4	3.4	3.3	3.1	3.2	3.6	2.2	1.9	1.3	1.4	1.0	1.0
Malta	-0.3	2.0	0.5	0.9	0.9	3.0	2.5	1.6	4.1	4.1	4.0	2.5	3.2	2.2	2.1
Netherlands	2.3	0.2	-0.8	0.7	1.1	2.5	3.1	3.2	2.6	2.7	2.0	2.0	2.2	2.0	2.2
Norway	5.7	7.2	8.7	6.7	4.6	4.1	3.4	2.3	2.3	1.4	2.4	1.3	2.6	2.3	2.3
Portugal	19.6	11.8	9.4	9.7	12.6	13.4	10.5	9.5	6.7	5.4	4.2	3.1	2.3	2.8	2.3
Spain	8.8	8.8	5.2	4.8	6.9	6.7	5.9	5.9	4.6	4.8	4.6	3.6	2.0	1.8	2.3
Sweden	7.4	4.2	4.2	5.8	6.5	10.4	9.4	2.2	4.7	2.2	2.5	0.5	0.5	-0.1	0.4
Switzerland	3.4	0.8	1.4	1.9	3.2	5.5	5.8	4.1	3.3	0.8	1.8	0.8	0.5	–	0.8
Turkey	45.7	34.3	37.8	69.4	63.3	60.3	65.8	70.1	66.2	105.2	88.0	79.8	84.8	86.2	64.9
North America	3.6	2.0	3.7	4.1	4.8	5.4	4.3	2.9	2.9	2.4	2.8	2.9	2.2	1.5	2.2
Canada	4.0	4.1	4.4	4.0	5.0	4.8	5.6	1.5	1.8	0.2	2.2	1.6	1.6	0.9	1.7
United States	3.6	1.9	3.6	4.1	4.8	5.4	4.2	3.0	3.0	2.6	2.8	3.0	2.3	1.6	2.2
Total above	4.7	2.7	3.5	3.9	5.0	5.5	4.6	3.6	3.2	2.7	2.9	2.7	2.1	1.6	1.8
Japan	2.0	0.7	–	0.7	2.4	3.1	3.2	1.7	1.3	0.7	-0.1	0.1	1.8	0.6	-0.3
Total above, *including Japan*	4.3	2.4	3.0	3.4	4.6	5.1	4.4	3.3	3.0	2.4	2.5	2.3	2.1	1.4	1.5
Memorandum items:															
European Union [b]	6.1	3.6	3.3	3.6	5.2	5.6	5.1	4.5	3.7	3.1	3.1	2.5	2.0	1.7	1.3
Euro area	5.8	3.1	2.7	3.0	4.4	4.4	4.5	4.5	3.8	3.0	2.9	2.4	1.7	1.3	1.3

Source: National statistics.

Note: All aggregates exclude Israel and Turkey. Growth rates of regional aggregates have been calculated as weighted averages of growth rates in individual countries. Weights were derived from 1996 private final consumption expenditure converted from national currency units into dollars using 1996 purchasing power parities.

[a] West Germany 1985-1991.

[b] Fifteen countries.

APPENDIX TABLE B.1

Real GDP/NMP in the ECE transition economies, 1980, 1986-1999

(Indices, 1989=100)

	1980	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	88.7	97.8	99.4	100.8	100.0	93.2	82.9	79.3	79.0	82.1	86.9	90.3	92.1	93.8	95.1
Albania	79.4	93.1	92.4	91.0	100.0	90.0	64.8	60.1	65.9	71.4	80.9	88.2	82.0	88.6	95.0
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bulgaria	76.2	93.6	99.3	101.9	100.0	90.9	83.3	77.2	76.1	77.5	79.7	71.6	66.6	68.9	70.6
Croatia[a]	99.0	102.6	102.5	101.6	100.0	92.9	73.3	64.7	59.5	63.0	67.3	71.3	76.2	78.1	77.9
Czech Republic	..	93.2	93.7	95.7	100.0	98.8	87.3	86.9	86.9	88.8	94.1	98.7	97.7	95.5	95.3
Hungary	86.3	95.5	99.4	99.3	100.0	96.5	85.0	82.4	81.9	84.4	85.6	86.8	90.7	95.1	99.4
Poland	91.1	94.1	95.9	99.8	100.0	88.4	82.2	84.4	87.6	92.1	98.6	104.5	111.7	117.1	121.9
Romania	88.5	105.8	106.7	106.2	100.0	94.4	82.2	75.0	76.2	79.2	84.8	88.2	82.8	78.3	75.8
Slovakia	..	94.8	97.1	99.0	100.0	97.5	83.3	77.9	75.1	78.7	84.0	89.2	94.8	98.6	100.5
Slovenia	98.9	104.1	103.5	100.5	100.0	91.9	83.7	79.1	81.4	85.7	89.3	92.4	96.6	100.3	105.3
The former Yugoslav Republic of Macedonia	93.3	102.7	101.4	98.1	100.0	89.8	84.3	78.7	72.8	71.6	70.8	71.6	72.6	74.8	76.8
Yugoslavia[a]	95.7	101.4	100.2	98.8	100.0	92.1	81.4	58.7	40.6	41.7	44.2	46.8	50.3	51.5	41.6
Baltic states	67.8	85.6	89.0	96.0	100.0	97.8	89.9	67.9	58.2	55.2	56.4	58.8	63.7	66.7	65.1
Estonia	74.5	88.2	89.2	93.8	100.0	91.9	82.7	71.0	65.0	63.7	66.4	69.0	76.3	79.9	79.1
Latvia	68.5	85.1	89.0	93.6	100.0	102.9	92.2	60.1	51.1	51.5	51.0	52.7	57.3	59.5	59.5
Lithuania	64.7	84.9	88.9	98.4	100.0	96.7	91.2	71.8	60.2	54.3	56.1	58.7	63.0	66.2	63.4
CIS[b c]	77.5	92.4	93.9	98.1	100.0	96.8	90.9	78.0	70.4	60.3	56.9	55.0	55.6	54.0	55.5
Armenia	73.5	97.7	94.5	92.2	100.0	94.5	83.4	48.6	44.3	46.7	49.9	52.8	54.6	58.6	60.5
Azerbaijan	79.6	100.6	105.1	109.7	100.0	88.3	87.7	67.9	52.2	41.9	37.0	37.4	39.6	43.6	46.8
Belarus	65.7	88.9	91.3	92.4	100.0	98.1	96.9	87.6	81.0	70.8	63.4	65.2	72.6	78.7	81.4
Georgia	79.4	98.8	96.8	103.6	100.0	84.9	67.0	36.9	26.1	23.4	24.0	26.7	29.5	30.4	31.3
Kazakhstan	87.0	92.3	92.1	100.1	100.0	99.0	88.1	83.4	75.8	66.2	60.8	61.1	62.1	60.9	62.0
Kyrgyzstan	69.1	83.6	84.7	95.6	100.0	104.8	96.5	83.2	70.3	56.2	53.1	56.9	62.5	63.9	66.2
Republic of Moldova	72.1	89.2	90.3	91.9	100.0	97.6	80.5	57.2	56.5	39.0	38.3	36.0	36.6	34.2	32.7
Russian Federation	78.1	92.9	94.2	98.4	100.0	97.0	92.2	78.8	71.9	62.8	60.2	58.2	58.7	55.8	57.6
Tajikistan	80.8	95.0	93.9	106.9	100.0	100.2	91.7	62.1	52.0	40.9	35.8	29.8	30.3	32.0	33.1
Turkmenistan	80.7	93.4	97.1	107.5	100.0	101.8	97.0	82.5	83.7	69.2	64.2	68.5	60.7	63.8	74.0
Ukraine	75.0	90.0	93.4	95.2	100.0	96.4	88.0	79.3	68.0	52.5	46.1	41.5	40.2	39.4	39.3
Uzbekistan	76.0	88.0	88.4	97.0	100.0	99.2	98.7	87.7	85.7	81.2	80.5	81.9	86.1	89.9	93.9
Total above	80.3	93.7	95.2	98.7	100.0	95.9	88.8	78.2	72.4	65.9	64.8	64.3	65.4	64.6	66.1
Memorandum items:															
CETE-5	88.6	95.1	97.3	99.6	100.0	93.3	84.1	83.8	85.0	88.5	93.5	98.0	102.4	105.7	109.0
SETE-7	88.8	102.4	103.1	102.9	100.0	93.1	80.8	71.4	68.5	70.9	75.3	76.7	74.1	72.9	70.7
Czechoslovakia[b]	84.9	95.1	97.0	99.3	100.0	98.5	84.4	78.8	..	..	..	..	..	..	..
Yugoslavia (SFR)[a]	97.7	103.0	101.0	99.4	100.0	92.4	..	..	..	..	..	..	..	..	..
Former Soviet Union[b]	77.3	92.2	93.8	98.0	100.0	96.8	90.9	77.7	70.1	60.2	56.9	55.1	55.9	54.3	55.8
Former GDR	..	..	..	..	100.0	84.5	68.3	73.6	80.4	88.2	92.0	95.0	96.6	98.5	..

Source: UN/ECE Common Database, derived from national and CIS statistics.

Note: Data for the east European countries are based on a GDP measure, except where otherwise mentioned. For the countries of the former Soviet Union, NMP data for 1980-1990 were chain-linked to GDP data from 1990. Country indices were aggregated with previous year PPP-based weights obtained from the European Comparison Programme for 1996.

[a] Gross material product (1980-1989 for Croatia).

[b] Sum of individual country data for former members.

[c] Net material product for 1980-1990 (until 1992 in the case of Turkmenistan).

APPENDIX TABLE B.2

Real total consumption expenditure in the ECE transition economies, 1980, 1986-1999

(Indices, 1989=100 or earliest year available thereafter)

	1980	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Bulgaria	..	..	..	..	100.0	100.6	92.3	89.4	86.2	82.3	80.7	75.3	64.0	68.8	72.0
Croatia	..	..	..	..	..	..	100.0	87.2	85.3	92.0	106.6	106.5	117.1	118.4	115.9
Czech Republic	..	..	91.3	93.1	100.0	104.9	85.5	88.4	90.2	94.5	97.2	103.0	104.6	102.3	103.2
Hungary	92.2	101.5	104.9	102.0	100.0	97.3	92.2	92.8	97.9	95.6	89.3	86.6	88.6	91.7	95.6
Poland	108.0	109.3	111.8	114.7	100.0	88.3	94.9	98.2	103.0	107.0	110.5	118.4	125.6	130.8	136.4
Romania	83.9	85.8	88.7	90.6	100.0	108.9	96.0	90.7	91.8	95.3	105.5	112.9	108.1	103.7	99.1
Slovakia	..	85.4	89.2	92.1	100.0	103.3	76.9	75.6	74.2	71.5	73.9	82.4	86.5	91.1	89.2
Slovenia	..	..	..	..	..	100.0	91.6	88.8	99.1	102.6	110.2	113.3	116.9	121.5	128.9
The former Yugoslav Republic of Macedonia	..	..	..	..	..	100.0	93.9	84.2	89.7	95.9	94.2	96.4	98.4	101.9	102.4
Estonia	..	..	..	..	..	..	..	..	100.0	101.2	110.4	116.5	124.4	131.3	131.8
Latvia	..	..	..	..	..	100.0	76.7	49.2	46.5	47.4	47.0	50.8	52.7	56.0	55.5
Lithuania	..	..	..	..	..	..	..	..	..	..	100.0	108.2	116.4	125.4	120.2
Armenia	..	..	..	..	..	100.0	97.4	84.9	66.4	68.9	74.5	76.8	81.7	85.4	85.7
Azerbaijan	..	..	..	..	..	..	..	..	100.0	80.3	78.0	84.3	93.2	103.8	..
Belarus	..	..	..	..	..	100.0	93.4	84.0	82.1	72.1	65.3	67.4	73.8	81.2	84.6
Georgia	..	..	..	..	..	100.0	79.2	77.1	45.4	42.4	46.1	..	..	..	..
Kazakhstan	..	..	..	..	..	100.0	96.8	96.1	84.9	67.7	55.0	51.3	51.8	49.0	48.3
Kyrgyzstan	..	..	..	..	..	..	100.0	87.2	77.1	62.0	52.0	55.3	50.8	58.5	60.9
Republic of Moldova	..	..	..	..	..	..	..	..	100.0	82.6	90.3	99.7	111.5	109.3	92.9
Russian Federation	..	..	..	..	..	100.0	93.9	89.0	88.1	85.8	83.3	80.7	82.7	76.7	72.6
Ukraine	..	..	..	..	..	100.0	94.3	88.6	72.0	65.0	62.6	57.4	56.4	56.3	56.6

Source: UN/ECE Common Database, derived from national and CIS statistics.

APPENDIX TABLE B.3

Real gross fixed capital formation in the ECE transition economies, 1980, 1986-1999

(Indices, 1989=100 or earliest year available thereafter)

	1980	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Bulgaria	..	..	..	..	..	100.0	80.0	74.1	61.2	61.9	71.8	56.6	43.0	57.2	71.7
Croatia	..	..	..	..	..	..	100.0	88.5	94.5	93.6	108.2	148.8	183.5	189.0	177.9
Czech Republic	..	..	93.4	99.4	100.0	97.9	71.1	82.8	83.0	90.5	108.5	117.3	113.9	109.4	103.4
Hungary	114.7	100.8	110.7	100.6	100.0	92.9	83.1	81.0	82.6	92.9	88.9	94.8	103.6	117.3	125.0
Poland	124.6	116.4	116.5	126.5	100.0	75.2	71.9	73.6	75.7	82.6	96.2	115.2	140.1	160.0	171.1
Romania	163.7	163.3	161.0	157.6	100.0	64.4	44.0	48.9	52.9	63.9	68.3	72.2	73.4	69.6	62.1
Slovakia	..	..	..	..	..	100.0	74.8	71.5	67.7	64.6	68.0	89.7	100.4	111.6	90.6
Slovenia	..	..	..	..	..	100.0	88.5	77.1	85.4	97.4	113.8	123.9	138.2	153.9	180.1
The former Yugoslav Republic of Macedonia	..	..	..	..	..	100.0	95.8	79.9	73.6	67.3	74.1	79.0	75.6	76.7	77.6
Estonia	..	..	..	..	..	..	..	..	100.0	106.2	110.5	123.1	144.6	161.0	136.5
Latvia	..	..	..	..	..	100.0	36.1	25.7	21.6	21.8	23.7	29.0	35.0	50.4	45.1
Lithuania	..	..	..	..	..	..	..	..	..	..	100.0	117.6	143.6	157.8	149.0
Armenia	..	..	..	..	..	100.0	67.0	8.6	7.9	11.5	9.5	10.5	10.7	12.0	12.1
Azerbaijan	..	..	..	..	..	..	..	100.0	61.0	115.3	94.5	199.8	333.7	483.9	..
Belarus	..	..	..	..	..	100.0	105.3	85.6	79.1	68.3	48.1	46.6	56.7	62.5	59.1
Georgia	..	..	..	..	..	100.0	67.3	49.2	18.5	133.4	219.9	..	..	..	..
Kazakhstan	..	..	..	..	..	100.0	74.2	61.9	44.2	39.2	24.4	18.5	19.2	19.3	19.2
Kyrgyzstan	..	..	..	..	..	..	100.0	70.7	55.3	39.3	63.2	54.9	38.7	38.1	33.5
Republic of Moldova		..	..	..	..	..	..	..	100.0	56.5	50.8	63.8	60.4	66.0	53.2
Russian Federation	..	..	..	..	..	100.0	84.5	49.4	36.7	27.1	24.6	20.4	18.9	17.7	17.4
Ukraine	..	..	..	..	..	100.0	81.6	69.3	48.2	28.4	19.7	15.2	15.5	15.9	15.9

Source: UN/ECE Common Database, derived from national and CIS statistics.

APPENDIX TABLE B.4

Real gross industrial output in the ECE transition economies, 1980, 1986-1999

(Indices, 1989=100)

	1980	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	82.8	96.0	98.5	100.6	100.0	85.9	70.1	62.8	61.4	65.3	70.2	73.8	77.4	78.5	78.0
Albania	77.0	91.9	93.3	95.2	100.0	86.7	50.4	35.2	31.7	25.8	23.9	18.1	18.6	22.7	26.3
Bosnia and Herzegovina	106.0	104.1	101.1	98.1	100.0	101.8	76.9	25.5	2.0	1.7	2.8	5.2	7.0	8.7	9.6
Bulgaria	71.3	92.4	98.0	101.1	100.0	83.2	66.4	54.2	48.8	54.0	56.4	59.3	53.4	49.1	43.1
Croatia	88.7	99.4	102.0	100.6	100.0	88.7	63.4	54.2	51.0	49.6	49.7	51.3	54.8	56.8	56.0
Czech Republic	81.5	94.5	96.5	98.5	100.0	96.6	75.7	69.8	66.1	67.4	73.3	| 74.8	78.1	79.4	76.9
Hungary	92.9	104.0	106.4	105.3	100.0	90.7	74.0	66.8	69.5	76.2	79.7	82.4	91.5	103.0	114.0
Poland	86.3	92.3	95.5	100.5	100.0	75.8	69.7	71.7	76.3	85.5	93.8	101.6	113.3	117.3	122.3
Romania	76.9	96.8	99.2	101.9	100.0	81.9	63.3	49.4	50.1	51.7	56.6	| 60.1	55.8	48.1	42.7
Slovakia	76.7	95.2	98.6	100.8	100.0	94.0	73.1	66.1	63.6	66.8	72.3	74.2	76.2	79.1	76.4
Slovenia	90.3	102.7	101.6	98.9	100.0	89.5	78.4	68.1	66.1	70.4	71.8	72.5	73.2	75.9	75.6
The former Yugoslav Republic of Macedonia	72.1	95.0	97.3	95.6	100.0	89.4	74.0	62.3	53.7	48.0	42.9	44.3	45.0	47.0	45.8
Yugoslavia	80.0	96.8	97.6	98.4	100.0	88.0	72.5	57.0	35.7	36.2	37.6	40.4	44.2	45.8	35.2
Baltic states	72.1	88.9	92.7	96.6	100.0	98.6	95.1	64.7	44.4	36.3	37.1	38.9	42.1	44.6	41.3
Estonia	78.5	93.5	96.3	99.3	100.0	100.0	92.8	59.8	48.6	47.1	48.0	49.4	56.6	59.0	56.7
Latvia	72.5	89.9	93.7	97.1	100.0	100.8	100.2	65.6	44.6	40.1	38.7	40.8	46.4	47.9	45.3
Lithuania	70.0	87.2	91.2	95.6	100.0	97.4	94.0	65.8	43.2	31.7	33.4	35.0	36.2	39.2	35.3
CIS [a]	73.4	91.2	94.5	98.2	100.0	99.9	93.1	78.2	68.4	53.6	50.7	49.0	50.2	48.7	52.2
Armenia	76.3	105.3	110.3	109.1	100.0	92.5	85.4	44.2	39.5	41.6	42.2	42.8	43.2	42.3	44.5
Azerbaijan	76.1	92.7	96.1	99.4	100.0	93.7	85.4	59.4	47.7	35.9	28.2	26.3	26.4	27.0	28.0
Belarus	61.1	84.3	89.9	95.6	100.0	102.1	101.1	91.8	83.2	71.0	62.7	64.9	77.1	86.7	95.6
Georgia	70.6	93.9	96.2	99.3	100.0	94.3	73.0	39.6	25.0	15.2	13.2	14.1	15.2	15.0	16.1
Kazakhstan	72.4	90.2	94.1	97.6	100.0	99.2	98.3	84.7	72.2	51.9	47.7	47.8	49.7	48.5	49.8
Kyrgyzstan	66.7	87.8	89.0	95.1	100.0	99.4	99.1	73.5	56.3	35.5	26.7	27.8	38.8	40.9	40.2
Republic of Moldova	68.7	87.3	91.6	94.6	100.0	103.2	91.7	66.9	67.1	48.5	46.6	43.6	43.6	37.0	33.7
Russian Federation	74.4	91.8	95.0	98.6	100.0	99.9	91.9	75.4	64.7	51.2	49.5	47.5	48.5	46.0	49.7
Tajikistan	72.9	88.7	93.1	98.2	100.0	101.2	97.6	73.9	68.1	50.8	43.9	33.4	32.7	35.4	37.4
Turkmenistan	75.4	90.1	92.9	96.9	100.0	103.2	108.2	92.0	95.7	72.1	67.5	79.5	53.8	54.0	62.0
Ukraine	72.6	90.0	93.4	97.3	100.0	99.9	95.1	89.0	81.9	59.5	52.4	49.7	49.6	49.1	51.0
Uzbekistan	68.5	91.2	93.4	96.5	100.0	101.8	103.3	96.4	99.9	101.5	101.6	104.2	108.5	112.4	119.2
Total above	76.5	92.8	95.8	99.0	100.0	95.2	85.4	72.7	65.4	57.2	56.9	57.1	59.2	58.6	60.6
Memorandum items:															
CETE-5	85.4	95.8	98.3	100.7	100.0	87.0	73.1	69.6	70.4	76.0	82.2	86.3	93.5	97.7	100.4
SETE-7	78.6	96.3	98.8	100.6	100.0	84.1	65.4	52.0	47.0	48.3	51.1	53.9	51.8	48.0	42.5
Czechoslovakia	80.5	94.8	97.2	99.2	100.0	96.5	75.2	67.6	..	..	..	..	..	..	..
Yugoslavia (SFR) [a]	86.9	99.3	99.7	98.7	100.0	88.3	71.7	..	..	..	..	..	..	..	..
Former Soviet Union	73.4	91.1	94.5	98.2	100.0	99.8	93.2	77.7	67.5	53.0	50.2	48.6	49.9	48.6	51.8
Former GDR	75.2	92.5	94.7	97.7	100.0	72.7	37.0	34.8	36.8	42.0	44.4	45.9	49.1	52.8	55.3

Source: UN/ECE Common Database, derived from national and CIS statistics.

Note: Data for former Czechoslovakia and the SFR of Yugoslavia for 1980 until the breakup obtained as sum of individual country data for former members. For the countries of the former Soviet Union, data for 1980-1990 were chain-linked to national or CIS data from 1990. Country indices were aggregated with previous year PPP-based weights on the basis of data obtained from the European Comparison Programme for 1996.

[a] Generated from components.

APPENDIX TABLE B.5

Total employment in the ECE transition economies, 1980, 1986-1999

(Indices, 1989=100)

	1980	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	96.7	99.5	100.0	99.9	100.0	97.1	90.7	85.4	82.6	82.6	82.2	82.7	82.7	83.0	81.2
Albania	77.9	93.1	95.9	97.6	100.0	99.2	97.5	76.0	72.7	80.7	79.0	77.5	76.9	75.3	74.0
Bosnia and Herzegovina	..	..	..	..	100.0	97.1	58.1	22.1	9.9	9.1	10.1	22.5	34.4	36.4	37.6
Bulgaria	100.0	102.5	102.8	102.4	100.0	93.9	81.6	75.0	73.8	74.3	75.2	75.3	72.3	72.2	70.4
Croatia	87.4	98.6	100.6	100.4	100.0	97.1	89.2	79.3	76.6	74.8	73.9	74.5	73.9	78.8	78.5
Czech Republic	95.3	98.5	98.9	99.4	100.0	99.1	93.6	91.2	89.7	90.4	92.8	93.4	91.6	90.2	86.9
Hungary [a]	104.2	102.6	101.7	100.7	100.0	96.7	86.7	78.1	73.2	71.8	70.4	69.8	69.8	70.7	72.9
Poland	102.0	101.1	100.8	100.1	100.0	95.8	90.1	86.3	84.3	85.1	86.7	88.3	90.8	92.9	92.4
Romania [b]	94.6	97.5	97.9	98.7	100.0	99.0	98.5	95.5	91.9	91.5	86.7	85.7	82.4	80.5	76.9
Slovakia [b]	90.8	98.0	99.0	99.8	100.0	98.2	85.9	86.8	84.6	83.7	85.7	84.5	82.6	81.8	78.0
Slovenia [c]	84.0	90.4	101.9	101.3	100.0	96.1	88.7	83.8	81.3	79.3	79.1	78.7	78.6	78.7	80.2
The former Yugoslav Republic of Macedonia	81.2	98.6	99.9	99.7	100.0	98.2	90.7	86.4	81.5	76.6	69.0	65.8	61.8	60.1	61.1
Yugoslavia	83.4	96.5	99.0	99.8	100.0	97.0	94.1	90.9	88.3	86.5	85.3	84.8	89.9	89.7	80.5
Baltic states [d]	94.9	98.8	99.4	99.6	100.0	98.5	98.9	94.4	89.0	83.2	80.6	80.1	80.9	80.5	79.5
Estonia	..	97.9	97.6	97.6	100.0	98.6	96.4	91.4	84.5	82.7	78.3	77.0	77.4	76.4	73.3
Latvia	97.0	99.8	100.4	100.5	100.0	100.1	99.3	92.0	85.6	77.0	74.3	72.3	73.7	74.1	73.8
Lithuania	93.4	98.5	99.5	99.8	100.0	97.3	99.7	97.5	93.4	88.0	86.4	87.2	87.7	87.0	86.6
CIS	93.8	97.8	98.4	98.8	100.0	100.2	98.9	96.6	94.2	91.4	90.5	89.8	88.5	87.5	..
Armenia	86.6	98.6	99.5	101.4	100.0	102.4	105.0	99.2	97.0	93.5	92.8	90.2	86.2	84.0	82.9
Azerbaijan	62.7	72.8	74.7	75.2	100.0	100.9	101.7	101.4	101.2	98.9	98.4	100.5	100.7	100.9	100.9
Belarus	95.4	98.8	99.0	99.5	100.0	99.1	96.6	94.1	92.9	90.4	84.8	84.0	84.1	85.0	85.5
Georgia	92.7	100.1	101.0	101.1	100.0	102.3	93.3	73.5	66.4	64.8	79.0	79.1	82.7	84.6	..
Kazakhstan	86.2	93.5	94.7	96.0	100.0	101.3	100.1	98.3	89.9	85.4	85.0	84.6	84.0	79.5	79.2
Kyrgyzstan	81.9	95.0	97.9	98.7	100.0	100.5	99.6	105.6	96.6	94.6	94.4	95.0	97.1	98.0	101.5
Republic of Moldova [e]	97.3	99.6	99.7	98.9	100.0	99.1	99.0	98.0	80.7	80.4	80.0	79.4	78.7	78.5	71.5
Russian Federation	96.9	99.5	99.7	99.9	100.0	99.6	97.7	95.3	93.7	90.6	87.9	87.2	85.5	84.2	84.6
Tajikistan	76.7	91.2	94.5	96.9	100.0	103.2	104.9	101.6	98.7	98.7	98.6	92.1	95.3	95.6	91.9
Turkmenistan	79.8	95.8	98.5	101.2	100.0	103.4	107.0	110.5	114.0	118.5	122.5	124.7	127.2	128.8	129.7
Ukraine	99.6	100.5	100.3	99.9	100.0	99.9	98.3	96.3	94.1	90.5	93.3	91.3	88.8	87.9	85.8
Uzbekistan	75.4	88.9	93.2	95.9	100.0	104.2	109.2	108.7	108.5	109.9	110.8	112.3	113.8	115.4	116.5
Total above	94.6	98.3	98.8	99.1	100.0	99.3	96.6	93.4	90.9	88.8	88.0	87.6	86.8	86.1	..
Memorandum items:															
CETE-5	99.7	100.3	100.5	100.1	100.0	96.7	89.8	85.8	83.3	83.5	84.7	85.5	86.4	87.4	86.6
SETE-7	92.3	98.2	99.2	99.7	100.0	97.6	91.9	84.9	81.5	81.4	78.9	78.8	77.7	77.0	73.8
Former Soviet Union	93.8	97.8	98.4	98.8	100.0	100.2	98.9	96.5	94.0	91.2	90.2	89.5	88.3	87.3	..

Source: UN/ECE Common Database, derived from national and CIS statistics.

[a] End of year, up to 1992; since 1992, annual average.

[b] End of year.

[c] Self-employed excluded until 1987.

[d] Excluding Estonia until 1985.

[e] Excluding Transdniestria since 1993.

APPENDIX TABLE B.6

Employment in industry in the ECE transition economies, 1989-1999

(Indices, 1989=100)

	1989	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	100.0	95.6	86.7	76.7	71.9	69.5	68.6	68.3	66.2	65.1	61.7
Albania	..	..	..	..	..	..	..	..	..	..	..
Bosnia and Herzegovina	100.0	98.3	60.3	23.3	8.3	9.2	18.7	22.0	26.8	28.9	28.9
Bulgaria	100.0	91.0	74.7	64.8	59.5	57.3	56.0	55.4	53.0	50.8	46.7
Croatia	100.0	102.4	84.8	70.3	70.4	67.3	59.5	59.0	56.6	60.0	58.3
Czech Republic	100.0	95.8	92.2	85.1	81.0	76.6	77.1	76.4	76.0	75.5	73.0
Hungary	100.0	97.0	85.4	77.3	69.1	66.0	62.5	61.9	63.0	65.9	66.4
Poland	100.0	93.7	86.1	76.7	74.4	73.8	76.2	75.6	75.8	75.0	72.8
Romania	100.0	96.5	91.6	79.5	73.0	69.4	65.4	66.0	59.0	55.8	49.5
Slovakia	100.0	95.7	88.2	78.7	74.0	71.7	71.6	71.6	70.2	67.3	65.4
Slovenia	100.0	95.1	85.2	84.6	78.1	75.1	72.2	71.5	68.5	67.8	66.7
The former Yugoslav Republic of Macedonia	100.0	95.3	87.3	81.6	77.5	72.9	63.1	59.0	54.4	52.5	55.4
Yugoslavia	100.0	100.9	92.1	87.2	85.0	82.7	80.6	78.8	76.3	74.2	65.3
Baltic states	100.0	96.8	95.5	87.0	74.2	63.1	60.8	58.0	57.7	55.8	54.0
Estonia	100.0	97.0	93.0	85.8	73.6	70.7	76.4	73.1	68.9	67.5	63.6
Latvia	100.0	97.0	92.1	81.4	69.0	56.3	53.1	50.1	51.9	47.6	45.7
Lithuania	100.0	96.7	99.0	91.4	78.0	64.5	59.5	57.0	57.1	56.5	55.7
CIS	100.0	97.9	96.7	91.8	88.3	79.7	73.3	69.2	63.8	62.6	..
Armenia	100.0	102.6	95.0	84.0	75.2	73.7	62.8	52.9	47.5	43.4	42.5
Azerbaijan	100.0	97.1	94.9	88.9	81.1	77.4	72.9	58.6	50.1	52.0	52.8
Belarus	100.0	98.6	96.9	92.1	88.5	84.4	75.2	74.4	74.5	75.5	76.2
Georgia	100.0	104.2	92.6	66.0	56.5	51.6	46.8	33.6	25.8	26.4	..
Kazakhstan	100.0	98.5	99.9	96.2	83.6	76.9	69.6	66.9	59.0	57.8	57.9
Kyrgyzstan	100.0	99.9	92.7	89.5	80.5	72.0	61.2	54.6	51.2	50.1	47.4
Republic of Moldova [a]	100.0	102.4	95.1	93.1	55.0	52.1	44.7	43.9	42.9	40.8	35.9
Russian Federation	100.0	97.2	96.1	91.3	89.8	80.7	74.1	70.4	64.5	63.0	62.6
Tajikistan	100.0	102.5	100.8	98.2	86.1	81.9	71.9	71.1	62.5	60.1	51.4
Turkmenistan	100.0	104.2	100.8	101.0	110.7	110.5	115.4	119.9	132.9	150.2	152.9
Ukraine	100.0	98.1	97.3	92.7	87.9	78.3	72.2	66.8	61.2	59.3	54.4
Uzbekistan	100.0	101.5	102.5	101.5	103.2	90.1	92.3	93.5	93.7	94.1	94.9
Total above	100.0	97.2	93.5	86.9	82.8	76.1	71.5	68.7	64.5	63.2	..
Memorandum items:											
CETE-5	100.0	94.9	87.5	79.1	75.1	73.0	73.6	73.1	73.0	72.7	70.9
SETE-7	100.0	96.5	85.9	73.8	68.2	65.3	62.5	62.4	58.1	56.0	50.7
Former Soviet Union	100.0	97.9	96.7	91.6	87.9	79.2	72.9	68.9	63.6	62.3	..

Source: UN/ECE Common Database, derived from national and CIS statistics.

[a] Excluding Transdniestria since 1993.

APPENDIX TABLE B.7

Registered unemployment in the ECE transition economies, 1990-1999

(Per cent of labour force, end-of-period)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	..	9.6	12.4	14.0	13.6	12.5	11.7	11.9	12.6	14.6
Albania	9.5	9.2	27.0	22.0	18.0	12.9	12.3	14.9	17.6	18.2
Bosnia and Herzegovina	..	..	..	..	..	..	..	39.0	38.5	39.1
Bulgaria	1.8	11.1	15.3	16.4	12.8	11.1	12.5	13.7	12.2	16.0
Croatia	..	14.1	17.8	16.6	17.3	17.6	15.9	17.6	18.6	20.8
Czech Republic	0.7	4.1	2.6	3.5	3.2	2.9	3.5	5.2	7.5	9.4
Hungary	1.7	7.4	12.3	12.1	10.9	10.4	10.5	10.4	9.1	9.6
Poland	6.5	12.2	14.3	16.4	16.0	14.9	13.2	10.3	10.4	13.0
Romania	1.3	3.0	8.2	10.4	10.9	9.5	6.6	8.8	10.3	11.5
Slovakia	1.6	11.8	10.4	14.4	14.8	13.1	12.8	12.5	15.6	19.2
Slovenia	..	10.1	13.3	15.5	14.2	14.5	14.4	14.8	14.6	13.0
The former Yugoslav Republic of Macedonia [a]	..	24.5	26.2	27.7	30.0	36.6	38.8	41.7	41.4	47*
Yugoslavia [a b]	..	21.0	24.6	24.0	23.9	24.7	26.1	25.6	27.2	27.4
Baltic states	..	..	2.1	4.5	5.3	6.6	6.4	6.3	7.3	9.1
Estonia [c]	..	..	1.6	5.0	5.1	5.0	5.6	4.6	5.1	6.7
Latvia	..	..	2.3	5.8	6.5	6.6	7.2	7.0	9.2	9.1
Lithuania	..	..	3.5	3.4	4.5	7.3	6.2	6.7	6.9	10.0
CIS	..	..	2.7	3.6	4.4	5.8	6.6	7.6	9.0	8.3
Armenia	..	..	3.5	6.3	6.0	8.1	9.7	11.0	8.9	11.5
Azerbaijan	..	..	0.2	0.7	0.9	1.1	1.1	1.3	1.4	1.2
Belarus	..	..	0.5	1.3	2.1	2.7	4.0	2.8	2.3	2.0
Georgia	..	..	0.3	2.0	3.8	3.4	3.2	8.0	4.2	5.6
Kazakhstan	..	..	0.4	0.6	1.0	2.1	4.1	3.9	3.7	3.9
Kyrgyzstan	..	..	0.1	0.2	0.8	3.0	4.5	3.1	3.1	3.0
Republic of Moldova	..	..	0.7	0.7	1.0	1.4	1.5	1.7	1.9	2.1
Russian Federation [d]	..	..	4.7	5.5	7.5	8.9	10.0	11.2	13.3	12.2
Tajikistan	..	..	0.4	1.1	1.8	1.8	2.4	2.8	2.9	3.1
Turkmenistan	..	..	..	..	..	..	..	..	..	..
Ukraine	..	..	0.3	0.4	0.3	0.6	1.5	2.8	4.3	4.3
Uzbekistan	..	..	0.1	0.2	0.3	0.3	0.3	0.3	0.4	0.5
Memorandum items:										
CETE-5	..	9.7	11.3	13.3	12.9	12.0	11.2	9.8	10.2	12.5
SETE-7	..	9.3	14.2	15.1	14.6	13.7	12.5	14.3	15.4	16.5
Russian Federation [e]	..	0.1	0.8	1.1	2.1	3.2	3.4	2.8	2.7	1.7
Former-GDR	..	..	13.5	15.4	13.5	14.9	15.9	19.4	17.4	17.7

Source: National statistics and direct communications from national statistical offices to UN/ECE secretariat.

[a] The data reported on employment cover only the social sector in agriculture, hence unemployment rates are biased upwards.

[b] Since 1999, excluding Kosovo and Metohia.

[c] Job seekers.

[d] Based on Russian Federation Goskomstat's monthly estimates according to the ILO definition, i.e. including all persons not having employment but actively seeking work.

[e] Registered unemployment.

APPENDIX TABLE B.8

Consumer prices in the ECE transition economies, 1990-1999

(Annual average, percentage change over preceding year)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Albania	..	35.5	193.1	85.0	21.5	8.0	12.7	33.1	20.3	- 0.1
Bosnia and Herzegovina	594.0	116.2	64 218.3	38 825.1	553.5	- 12.1	- 21.2	11.8	4.9	- 0.6
Bulgaria	23.8	338.5	91.3	72.9	96.2	62.1	123.1	1 082.6	22.2	0.4
Croatia[a]	609.5	123.0	663.6	1 516.6	97.5	2.0	3.6	3.7	5.9	4.3
Czech Republic	9.9	56.7	11.1	20.8	10.0	9.1	8.9	8.4	10.6	2.1
Hungary	28.9	35.0	23.0	22.6	19.1	28.5	23.6	18.4	14.2	10.1
Poland	585.8	70.3	45.3	36.9	33.2	28.1	19.8	15.1	11.7	7.4
Romania	5.1	170.2	210.7	256.2	137.1	32.2	38.8	154.9	59.3	45.9
Slovakia	10.4	61.2	10.2	23.1	13.4	10.0	6.1	6.1	6.7	10.5
Slovenia	551.6	115.0	207.3	31.7	21.0	13.5	9.9	8.4	8.1	6.3
The former Yugoslav Republic of Macedonia[a]	608.4	114.9	1 505.5	353.1	121.0	16.9	4.1	3.8	1.1	- 1.4
Yugoslavia	580.0	122.0	8 926.0	2.2E+14	7.9E+10	71.8	90.5	23.2	30.4	44.1
Estonia	18.0	202.0	1 078.2	89.6	47.9	28.9	23.1	11.1	10.6	3.5
Latvia	10.9	172.2	951.2	109.1	35.7	25.0	17.7	8.5	4.7	2.4
Lithuania	9.1	216.4	1 020.5	410.1	72.0	39.5	24.7	8.8	5.1	0.8
Armenia	6.9	174.1	728.7	3 731.8	4 964.0	175.5	18.7	13.8	8.7	0.7
Azerbaijan	6.1	106.6	912.6	1 129.7	1 663.9	411.5	19.8	3.6	- 0.8	- 8.6
Belarus	4.7	94.1	971.2	1 190.9	2 219.6	709.3	52.7	63.9	73.2	293.7
Georgia	4.2	78.7	1 176.9	4 084.9	22 470.6	177.6	39.4	7.1	3.5	19.3
Kazakhstan	5.6	114.5	1 504.3	1 662.7	1 879.5	175.9	39.1	17.4	7.3	8.4
Kyrgyzstan	5.5	113.9	854.6	1 208.7	278.1	42.9	30.3	25.5	12.1	36.7
Republic of Moldova	5.7	114.4	1 308.0	1 751.0	486.4	29.9	23.5	11.8	7.7	39.3
Russian Federation	5.2	160.0	1 528.7	875.0	309.0	197.4	47.8	14.7	27.8	85.7
Tajikistan	5.9	112.9	822.0	2 884.8	350.3	682.1	422.4	85.4	43.1	27.5
Turkmenistan	5.7	88.5	483.2	3 128.4	2 562.1	1 105.3	714.0	83.7	16.8	..
Ukraine	5.4	94.0	1 209.6	4 734.9	891.2	376.7	80.2	15.9	10.6	22.7
Uzbekistan	5.8	97.3	414.5	1 231.8	1 281.4	117.3	56.3	73.2	17.7	29.0

Source: UN/ECE Common Database, derived from national statistics.

Note: From 1992 onwards indices derived from monthly data except for Armenia, Georgia, Hungary, Slovenia, Yugoslavia (from 1993); Turkmenistan (from 1995); Uzbekistan (from 1996).

[a] Retail prices.

APPENDIX TABLE B.9

Producer price indices in the ECE transition economies, 1990-1999
(Annual average, percentage change over preceding year)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Albania	..	..	..	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	129.5	70 374.7	10 967.6	1 184.8	68.7	-4.8	3.2	3.6	4.3
Bulgaria	14.7	296.4	56.1	28.3	59.1	48.9	129.7	888.1	20.0	3.2
Croatia	455.3	146.3	826.0	1510.4	77.7	0.8	1.3	3.7	-1.5	2.5
Czech Republic	2.5	70.3	10.8	9.3	5.4	7.8	4.9	5.1	4.9	1.1
Hungary	22.0	32.6	12.3	14.1	12.3	28.5	22.3	20.9	11.4	5.0
Poland	622.4	40.9	28.0	32.6	31.0	26.0	13.4	12.2	7.2	5.7
Romania	26.9	220.1	184.8	165.0	140.7	35.3	50.0	150.5	33.2	42.2
Slovakia	5.2	68.9	5.3	17.0	10.0	9.1	4.0	4.6	3.3	3.7
Slovenia	390.4	124.1	215.7	23.3	17.8	12.4	6.7	6.1	6.0	2.2
The former Yugoslav Republic of Macedonia	394.0	112.0	2 193.5	258.6	88.7	4.7	-0.1	3.5	4.0	-0.2
Yugoslavia	468.0	124.0	8 993.0	1.4E+13	7.9E+10	75.7	88.8	20.6	25.9	43.3
Estonia	19.3	208.4	1 208.0	75.2	36.1	25.5	14.7	8.8	4.1	-1.3
Latvia	..	192.0	1 310.0	117.1	17.0	12.0	13.8	4.3	2.0	-4.0
Lithuania	..	148.2	1 510.0	391.7	44.7	28.7	16.5	6.0	-3.8	3.0
Armenia	..	120.0	947.0	892.0	4 394.4	187.8	36.3	21.7	6.0	4.1
Azerbaijan	..	179.5	7 453.6	1 974.0	3 971.6	1 340.1	70.6	11.4	-5.5	-1.3
Belarus	2.1	151.1	1 939.2	1 536.3	3 362.1	538.6	35.7	89.4	72.8	355.7
Georgia	..	..	..	..	..	..	..	..	..	..
Kazakhstan	..	193.0	2 465.1	1 042.8	2 952.2	173.6	24.8	15.6	0.8	19.0
Kyrgyzstan	..	160.0	1 664.0	831.0	223.6	34.0	31.0	34.5	12.7	52.2
Republic of Moldova	..	130.0	1 210.9	1 078.5	711.7	52.2	30.2	14.9	9.7	47.1
Russian Federation	3.9	240.0	3 280.0	900.0	340.0	237.6	50.8	15.0	7.0	59.1
Tajikistan	..	163.0	1 316.5	1 080.0	665.5	351.7	340.7	103.7	28.4	45.6
Turkmenistan	..	211.0	994.0	1 610.0	911.0	296.5	2 974.9	260.6	-30.5	..
Ukraine	..	122.0	2 668.8	4 698.3	901.2	450.8	54.6	15.1	13.2	31.1
Uzbekistan	..	147.0	1 296.0	1 119.0	2 162.6	792.5	128.5	53.9	40.0	38.0

Source: UN/ECE Common Database, derived from national statistics.

Note: From 1994 onwards indices derived from monthly data except: Bosnia and Herzegovina, Croatia, Czech Republic, Poland, The former Yugoslav Republic of Macedonia (from 1992); Hungary, Romania, Slovakia, Slovenia (from 1993); Turkmenistan, Yugoslavia (from 1995).

APPENDIX TABLE B.10

Nominal gross wages in industry in the ECE transition economies, 1990-1999

(Annual average, percentage change over preceding year)[a]

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Albania[b]	..	..	..	69.5	34.5	29.3	..	..	20.4	10.4
Bosnia and Herzegovina[c]	..	..	..	..	..	4.1	249.4	50.8	31.1	15.4
Bulgaria	20.8	175.5	132.8	55.1	53.9	57.7	90.4	882.9	34.5	..
Croatia[c]	453.7	40.7	466.7	1 444.1	130.5	44.0	11.8	16.3	10.6	10.1
Czech Republic	3.0	16.5	21.0	22.6	16.9	18.3	17.7	11.9	10.6	6.9
Hungary[b]	27.2	33.4	24.3	24.9	23.3	19.1	21.7	21.8	16.6	13.5
Poland[c]	365.5	64.0	41.2	37.8	39.8	30.1	25.8	19.9	14.1	37.5
Romania[c]	9.7	125.0	173.5	210.7	139.4	55.3	56.7	99.5	49.3	47.7
Slovakia[b]	4.3	15.0	16.9	23.1	17.7	15.2	14.6	11.1	8.0	7.9
Slovenia	361.5	68.4	196.7	45.1	27.1	17.1	14.0	12.1	10.7	9.3
The former Yugoslav Republic of Macedonia[c]	433.6	79.2	1 083.7	454.0	105.8	11.1	3.6	2.3	3.1	1.5
Yugoslavia[c]	400.0	100.6	4 886.4	-62.5	229.6	74.1	74.5	41.7	39.6	24.6
Estonia[d]	..	122.2	570.3	93.3	71.3	34.6	23.8	19.7	13.2	0.9
Latvia	..	104.5	609.8	112.0	60.0	24.1	14.9	21.6	6.5	4.0
Lithuania	15.3	183.9	632.5	246.1	70.0	43.2	34.0	21.7	12.0	2.5
Armenia	5.9	31.8	352.3	739.1	3 640.2	210.9	62.3	41.7	20.5	12.7
Azerbaijan	4.4	82.9	870.4	700.8	575.7	354.8	53.0	36.8	22.0	..
Belarus	14.1	112.1	910.9	1 073.8	69.6	618.7	58.5	96.8	109.4	323.9
Georgia	6.0	33.9	457.3	2 114.7	23 327.5	87.5	145.4	12.7	26.8	..
Kazakhstan	11.0	91.5	1 056.0	1 008.6	1 422.8	178.2	30.9	22.5	7.8	18.1
Kyrgyzstan	0.5	62.1	638.3	745.6	176.3	54.8	29.1	60.3	20.0	16.3
Republic of Moldova	14.2	90.1	815.0	773.0	284.4	43.8	32.2	24.9	16.6	22.5
Russian Federation	13.0	94.9	1 065.7	798.2	260.2	131.4	64.3	21.6	14.3	52.2
Tajikistan	8.0	76.2	550.2	917.5	142.2	145.2	425.3	71.9	96.4	26.4
Turkmenistan	..	83.8	1 010.1	1 467.7	622.2	686.2	915.3	121.5	27.1	..
Ukraine	39.0	107.9	1 419.0	2 286.1	737.8	408.5	71.5	13.5	5.9	18.1
Uzbekistan	..	82.3	706.1	1 159.3	806.8	278.4	99.8	76.3	60.3	50.0

Source: UN/ECE Common Database, derived from national statistics.

[a] Calculated from reported annual average wages.

[b] Gross wages in total economy. For Hungary for 1990-1992; for Slovakia for 1990-1991.

[c] Net wages in industry. For Poland and Romania for 1990-1992.

[d] Manufacturing for 1991-1993.

APPENDIX TABLE B.11

Merchandise exports of the ECE transition economies, 1980, 1987-1999

(Billion dollars)

	1980	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Eastern Europe	56.367	63.550	65.020	63.850	61.733	57.241	59.333	62.675	72.937	94.777	100.206	107.372	119.173	118.218
Albania	0.320	0.230	0.230	0.302	0.231	0.101	0.072	0.123	0.139	0.202	0.213	0.137	0.207	0.265
Bulgaria	7.160	7.841	7.554	6.651	5.232	3.433	3.992	3.769	3.935	5.345	4.890	4.940	4.194	3.959
Czechoslovakia	10.475	12.355	12.381	11.988	10.728	11.319	..	..	..	..	..	..	..	..
Czech Republic	..	..	..	..	..	..	8.767	14.463	15.882	21.273	22.180	22.779	26.351	26.845
Slovakia	..	..	..	..	..	..	3.500	5.458	6.714	8.585	8.822	9.640	10.775	10.246
Hungary	8.609	9.584	9.999	9.673	9.731	10.226	10.681	8.921	10.701	12.867	15.704	19.100	23.005	25.012
Poland	13.071	14.095	14.573	14.665	18.291	14.912	13.187	14.202	17.240	22.887	24.440	25.756	28.229	27.362
Romania	9.217	8.580	8.971	8.076	4.570	4.266	4.363	4.892	6.151	7.910	8.085	8.431	8.302	8.505
Yugoslavia (SFR)	7.514	10.866	11.311	12.496	12.950	12.984	14.772	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	..	1.550	2.100	1.850	..	..	..	..	0.024	0.058	0.193	0.352	0.518
Croatia	..	..	2.300	2.600	4.020	3.310	4.353	3.709	4.260	4.633	4.512	4.171	4.541	4.271
Slovenia	1.836	2.757	3.278	3.408	4.118	3.874	6.681	6.083	6.828	8.316	8.310	8.369	9.050	8.546
The former Yugoslav Republic of Macedonia	..	..	..	0.654	1.113	1.095	1.199	1.055	1.086	1.204	1.147	1.180	1.310	1.192
Yugoslavia	..	4.063	4.298	4.461	4.651	4.704	2.539	..	..	1.531	1.846	2.677	2.858	1.498
Baltic states	..	..	..	..	..	..	2.139	4.197	4.324	5.844	6.877	8.467	8.759	7.657
Estonia	..	..	..	..	..	..	0.444	0.802	1.305	1.838	2.079	2.934	3.236	2.938
Latvia	..	..	..	..	..	..	0.843	1.401	0.988	1.304	1.443	1.673	1.812	1.723
Lithuania	..	..	..	..	..	..	0.852	1.994	2.031	2.705	3.355	3.860	3.711	2.996
CIS: total	..	..	..	..	..	..	..	..	89.991	110.622	121.936	122.913	104.266	103.117*
CIS: non-CIS	..	..	..	..	..	..	51.242	52.547	62.652	80.007	87.897	88.698	76.840	81.669*
Armenia	..	..	..	..	..	..	..	0.156	0.216	0.271	0.290	0.233	0.221	0.232
Non-CIS	..	..	..	..	..	..	0.026	0.029	0.058	0.101	0.162	0.138	0.140	0.176
Azerbaijan	..	..	..	..	..	..	1.484	0.725	0.653	0.637	0.631	0.781	0.606	0.929
Non-CIS	..	..	..	..	..	..	0.754	0.351	0.378	0.352	0.341	0.403	0.374	0.718
Belarus	..	..	..	..	..	..	..	..	2.510	4.707	5.652	7.301	7.070	5.922
Non-CIS	..	..	..	..	..	..	1.194	0.789	1.031	1.777	1.888	1.922	1.910	2.286
Georgia	..	..	..	..	..	..	..	..	0.156	0.154	0.199	0.240	0.193	0.238
Non-CIS	..	..	..	..	..	..	0.068	0.069	0.039	0.057	0.070	0.102	0.085	0.131
Kazakhstan	..	..	..	..	..	..	..	..	3.231	5.250	5.911	6.497	5.436	5.592
Non-CIS	..	..	..	..	..	..	1.398	1.501	1.357	2.366	2.732	3.515	3.266	4.131
Kyrgyzstan	..	..	..	..	..	..	0.317	0.396	0.340	0.409	0.505	0.604	0.514	0.454
Non-CIS	..	..	..	..	..	..	0.077	0.112	0.117	0.140	0.112	0.285	0.283	0.271
Republic of Moldova	..	..	..	..	..	..	0.470	0.483	0.565	0.746	0.795	0.875	0.632	0.462
Non-CIS	..	..	..	..	..	..	0.166	0.178	0.159	0.279	0.252	0.267	0.203	0.209
Russian Federation [a]	..	..	..	..	..	..	..	..	66.862	79.869	86.889	86.627	72.550	72.902*
Non-CIS	..	..	..	..	..	..	42.376	44.297	53.001	65.607	70.975	69.959	58.883	62.300*
Tajikistan	..	..	..	..	..	..	0.193	0.350	0.492	0.749	0.770	0.746	0.597	0.689
Non-CIS	..	..	..	..	..	..	0.109	0.227	0.399	0.497	0.439	0.473	0.394	0.374
Turkmenistan	..	..	..	..	..	..	..	..	2.145	1.881	1.682	0.751	0.594	1.187
Non-CIS	..	..	..	..	..	..	0.908	1.049	0.494	0.951	0.610	0.300	0.442	0.698
Ukraine	..	..	..	..	..	..	7.415	7.817	10.272	13.128	14.401	14.232	12.637	11.582
Non-CIS	..	..	..	..	..	..	3.297	3.223	4.653	6.168	6.996	8.646	8.435	8.329
Uzbekistan	..	..	..	..	..	..	..	..	2.549	2.821	4.211	4.026	3.218	2.928
Non-CIS	..	..	..	..	..	..	0.869	0.721	0.966	1.712	3.321	2.689	2.425	2.047
Former Soviet Union	57.942	63.406	62.016	62.286	59.056	46.660	..	..	..	..	..	..	..	..
Total	114.310	126.957	127.035	126.136	120.788	103.901	112.714	119.419	167.252	211.243	229.019	238.751	232.198	228.992*

Source: UN/ECE secretariat, based on national statistical publications and direct communications from national statistical offices.

Note: Trade flows reported include the "new trade" among members of the dissolved federal states: former Czechoslovakia (from 1993), SFR of Yugoslavia (from 1992) and the former USSR: for the Baltic states (from 1992) and for the CIS. Data excluding the "new trade" were shown in earlier issues of this publication. Changes in the method of recording trade are reflected from 1993 in data for the Czech Republic (inclusion of OPT transactions, etc.), from 1995 in Latvia (imports registered c.i.f.) and Lithuania (change from special to general system), from 1996 in Hungary (inclusion of trade flows of free trade zones) and from 1997 in Slovakia (inclusion of OPT transactions, etc.).

All trade values for the years 1991-1999 are expressed in dollars at prevailing market exchange rates. For earlier years, values reported in national currencies were adjusted by the ECE secretariat to remove distortions stemming from mutually inconsistent national rouble/dollar cross-rates in the valuation of the then important intra-CMEA trade flows. For details on the revaluation, see the note to table 2.1.3 and the discussion in box 2.1 in UN/ECE, *Economic Bulletin for Europe*, Vol. 43, 1991.

[a] Russian Goskomstat data excluding trade by physical persons (shuttle trade), but including trade flows not crossing the Russian borders such as off-board fish sales and natural gas deliveries under debt repayment agreements with former CMEA countries.

APPENDIX TABLE B.12

Merchandise imports of the ECE transition economies, 1980, 1987-1999

(Billion dollars)

	1980	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	65.443	62.033	60.158	61.185	63.408	61.610	68.388	76.285	86.128	117.026	135.887	146.170	159.488	155.982
Albania	0.320	0.230	0.280	0.385	0.381	0.409	0.524	0.421	0.549	0.650	0.913	0.620	0.795	0.885
Bulgaria	6.321	8.222	8.131	7.325	5.584	2.700	4.530	5.120	4.272	5.638	5.074	4.932	4.957	5.450
Czechoslovakia	10.619	12.503	12.180	11.772	11.808	10.962	..	..	..	..	..	..	..	..
Czech Republic	..	..	..	..	..	..	10.368	14.617	17.427	25.265	27.919	27.563	28.789	28.863
Slovakia	..	..	..	..	..	..	3.889	6.332	6.634	8.777	11.112	11.622	13.006	11.245
Hungary	9.188	9.859	9.372	8.863	8.797	11.449	11.123	12.648	14.554	15.466	18.144	21.234	25.706	28.008
Poland	14.705	12.686	12.987	12.941	12.619	15.531	16.141	18.758	21.566	29.043	37.137	42.314	47.054	45.885
Romania	11.061	6.355	5.361	5.834	6.889	5.793	6.260	6.522	7.109	10.278	11.435	11.280	11.838	10.392
Yugoslavia (SFR)	13.229	12.178	11.847	14.064	17.330	14.765	..	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	..	1.300	1.850	1.750	..	..	..	..	0.524	1.204	1.555	2.120	2.431
Croatia	..	..	2.900	3.750	5.133	3.811	4.346	4.166	5.229	7.510	7.788	9.104	8.383	7.777
Slovenia	2.463	2.722	2.914	3.216	4.727	4.131	6.141	6.501	7.304	9.492	9.421	9.367	10.098	9.954
The former Yugoslav Republic of Macedonia	..	..	..	0.934	1.531	1.274	1.206	1.199	1.484	1.719	1.627	1.754	1.912	1.796
Yugoslavia	..	4.851	4.915	5.383	6.701	5.548	3.859	..	..	2.665	4.113	4.826	4.830	3.296
Baltic states	..	..	..	..	..	..	1.802	4.101	5.251	8.006	10.110	12.809	13.768	11.851
Estonia	..	..	..	..	..	..	0.406	0.896	1.659	2.540	3.231	4.441	4.786	4.115
Latvia	..	..	..	..	..	..	0.794	0.961	1.240	1.818	2.320	2.724	3.189	2.946
Lithuania	..	..	..	..	..	..	0.602	2.244	2.352	3.649	4.559	5.644	5.794	4.791
CIS: total	..	..	..	..	..	..	..	..	63.137	79.576	86.960	94.316	81.127	61.813*
CIS: non-CIS	..	..	..	..	..	..	42.297	33.696	36.743	45.678	49.205	57.780	50.763	37.777*
Armenia	..	..	..	..	..	..	..	0.255	0.394	0.674	0.856	0.892	0.902	0.802
Non-CIS	..	..	..	..	..	..	0.050	0.087	0.188	0.340	0.578	0.593	0.672	0.626
Azerbaijan	..	..	..	..	..	..	0.940	0.629	0.778	0.668	0.961	0.794	1.077	1.036
Non-CIS	..	..	..	..	..	..	0.333	0.241	0.292	0.440	0.621	0.443	0.673	0.711
Belarus	..	..	..	..	..	..	..	..	3.066	5.564	6.939	8.689	8.549	6.664
Non-CIS	..	..	..	..	..	..	0.843	1.119	0.974	1.887	2.369	2.872	2.995	2.381
Georgia	..	..	..	..	..	..	..	..	0.338	0.385	0.687	0.944	0.884	0.602
Non-CIS	..	..	..	..	..	..	0.228	0.167	0.066	0.231	0.417	0.603	0.617	0.377
Kazakhstan	..	..	..	..	..	..	..	..	3.561	3.807	4.241	4.301	4.350	3.683
Non-CIS	..	..	..	..	..	..	0.469	0.494	1.384	1.154	1.295	1.969	2.290	2.088
Kyrgyzstan	..	..	..	..	..	..	0.421	0.448	0.317	0.522	0.838	0.709	0.842	0.600
Non-CIS	..	..	..	..	..	..	0.071	0.112	0.107	0.168	0.351	0.273	0.401	0.341
Republic of Moldova	..	..	..	..	..	..	0.640	0.628	0.659	0.841	1.072	1.172	1.024	0.573
Non-CIS	..	..	..	..	..	..	0.179	0.184	0.183	0.272	0.420	0.567	0.584	0.344
Russian Federation[a]	..	..	..	..	..	..	..	..	38.661	46.709	47.373	53.568	43.980	31.026*
Non-CIS	..	..	..	..	..	..	36.984	26.807	28.344	33.117	32.798	39.365	32.703	22.589*
Tajikistan	..	..	..	..	..	..	0.254	0.630	0.547	0.810	0.668	0.750	0.711	0.663
Non-CIS	..	..	..	..	..	..	0.132	0.374	0.314	0.332	0.285	0.268	0.265	0.148
Turkmenistan	..	..	..	..	..	..	..	..	1.468	1.364	1.011	1.183	1.008	1.478
Non-CIS	..	..	..	..	..	..	0.030	0.501	0.782	0.619	0.450	0.531	0.530	0.978
Ukraine	..	..	..	..	..	..	6.892	9.533	10.745	15.484	17.603	17.128	14.676	11.846
Non-CIS	..	..	..	..	..	..	2.049	2.652	2.907	5.488	6.427	7.249	6.779	5.103
Uzbekistan	..	..	..	..	..	..	..	..	2.603	2.748	4.712	4.186	3.125	2.841
Non-CIS	..	..	..	..	..	..	0.929	0.958	1.202	1.630	3.195	3.047	2.256	2.091
Former Soviet Union	52.218	53.794	58.044	64.983	64.963	45.405	..	..	..	..	..	..	..	..
Total	117.661	115.827	118.202	126.168	128.371	106.901	112.487	114.082	154.516	204.609	232.957	253.295	254.383	229.647*

Source: UN/ECE secretariat, based on national statistical publications and direct communications from national statistical offices.

Note: See appendix table B.11.

[a] Russian Goskomstat data excluding trade by physical persons (shuttle trade), but including trade flows not crossing the Russian borders such as off-board fish sales and natural gas deliveries under debt repayment agreements with former CMEA countries.

APPENDIX TABLE B.13

Balance of merchandise trade of the ECE transition economies, 1980, 1987-1999

(Billion dollars)

	1980	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe	-9.076	1.517	4.861	2.665	-1.675	-4.369	-9.055	-13.610	-13.190	-22.250	-35.680	-38.799	-40.315	-37.764
Albania	–	–	-0.050	-0.083	-0.150	-0.308	-0.452	-0.298	-0.410	-0.448	-0.701	-0.483	-0.589	-0.620
Bulgaria	0.839	-0.381	-0.577	-0.674	-0.352	0.732	-0.538	-1.352	-0.336	-0.293	-0.184	0.008	-0.763	-1.491
Czechoslovakia	-0.144	-0.147	0.201	0.216	-1.080	0.356	..	..	..	..	..	..	..	..
Czech Republic	..	..	..	..	..	..	-1.601	-0.154	-1.545	-3.992	-5.739	-4.784	-2.438	-2.018
Slovakia	..	..	..	..	..	..	-0.389	-0.874	0.080	-0.192	-2.290	-1.983	-2.231	-0.999
Hungary	-0.579	-0.276	0.627	0.810	0.934	-1.223	-0.442	-3.727	-3.853	-2.599	-2.440	-2.134	-2.701	-2.996
Poland	-1.634	1.409	1.586	1.724	5.672	-0.619	-2.955	-4.555	-4.326	-6.156	-12.697	-16.558	-18.825	-18.522
Romania	-1.844	2.225	3.610	2.242	-2.320	-1.528	-1.897	-1.630	-0.958	-2.368	-3.351	-2.849	-3.536	-1.887
Yugoslavia (SFR)	-5.715	-1.312	-0.536	-1.568	-4.380	-1.780	14.772	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	..	0.250	0.250	0.100	..	..	..	..	-0.500	-1.146	-1.362	-1.768	-1.913
Croatia	..	..	-0.600	-1.150	-1.113	-0.501	0.007	-0.457	-0.969	-2.877	-3.276	-4.933	-3.842	-3.507
Slovenia	-0.626	0.035	0.365	0.192	-0.609	-0.257	0.540	-0.418	-0.476	-1.176	-1.111	-0.998	-1.048	-1.409
The former Yugoslav Republic of Macedonia	..	..	..	-0.280	-0.418	-0.179	-0.007	-0.144	-0.398	-0.515	-0.480	-0.574	-0.602	-0.604
Yugoslavia	..	-0.788	-0.617	-0.922	-2.050	-0.844	-1.320	..	..	-1.134	-2.267	-2.149	-1.972	-1.798
Baltic states	..	..	..	..	..	..	0.337	0.096	-0.927	-2.162	-3.232	-4.343	-5.009	-4.194
Estonia	..	..	..	..	..	..	0.038	-0.094	-0.353	-0.702	-1.152	-1.507	-1.550	-1.176
Latvia	..	..	..	..	..	..	0.049	0.440	-0.252	-0.514	-0.877	-1.051	-1.377	-1.223
Lithuania	..	..	..	..	..	..	0.250	-0.250	-0.322	-0.944	-1.204	-1.784	-2.083	-1.795
CIS: total	..	..	..	..	..	..	..	..	26.854	31.046	34.975	28.597	23.140	41.304*
CIS: non-CIS	..	..	..	..	..	..	8.945	18.851	25.909	34.329	38.692	30.919	26.077	43.892*
Armenia	..	..	..	..	..	..	..	-0.099	-0.178	-0.403	-0.566	-0.660	-0.682	-0.569
Non-CIS	..	..	..	..	..	..	-0.024	-0.058	-0.130	-0.239	-0.416	-0.455	-0.532	-0.450
Azerbaijan	..	..	..	..	..	..	0.544	0.096	-0.125	-0.031	-0.330	-0.013	-0.471	-0.107
Non-CIS	..	..	..	..	..	..	0.421	0.110	0.086	-0.088	-0.280	-0.040	-0.299	0.008
Belarus	..	..	..	..	..	..	..	..	-0.556	-0.857	-1.287	-1.388	-1.480	-0.742
Non-CIS	..	..	..	..	..	..	0.351	-0.330	0.057	-0.110	-0.481	-0.950	-1.085	-0.095
Georgia	..	..	..	..	..	..	..	..	-0.182	-0.231	-0.488	-0.704	-0.692	-0.364
Non-CIS	..	..	..	..	..	..	-0.160	-0.098	-0.027	-0.174	-0.347	-0.501	-0.532	-0.246
Kazakhstan	..	..	..	..	..	..	..	..	-0.330	1.443	1.670	2.196	1.086	1.910
Non-CIS	..	..	..	..	..	..	0.929	1.007	-0.027	1.212	1.437	1.547	0.976	2.043
Kyrgyzstan	..	..	..	..	..	..	-0.104	-0.052	0.023	-0.113	-0.333	-0.105	-0.328	-0.146
Non-CIS	..	..	..	..	..	..	0.005	–	0.010	-0.028	-0.239	0.012	-0.118	-0.070
Republic of Moldova	..	..	..	..	..	..	-0.170	-0.145	-0.094	-0.095	-0.277	-0.297	-0.392	-0.111
Non-CIS	..	..	..	..	..	..	-0.013	-0.006	-0.024	0.007	-0.168	-0.300	-0.381	-0.135
Russian Federation [a]	..	..	..	..	..	..	..	..	28.201	33.160	39.516	33.059	28.570	41.876*
Non-CIS	..	..	..	..	..	..	5.392	17.490	24.657	32.490	38.177	30.594	26.180	39.711*
Tajikistan	..	..	..	..	..	..	-0.061	-0.280	-0.055	-0.061	0.102	-0.004	-0.114	0.026
Non-CIS	..	..	..	..	..	..	-0.023	-0.147	0.085	0.165	0.154	0.205	0.129	0.225
Turkmenistan	..	..	..	..	..	..	..	..	0.677	0.517	0.670	-0.432	-0.414	-0.291
Non-CIS	..	..	..	..	..	..	0.878	0.548	-0.288	0.332	0.160	-0.231	-0.088	-0.280
Ukraine	..	..	..	..	..	..	0.523	-1.716	-0.473	-2.356	-3.202	-2.896	-2.038	-0.265
Non-CIS	..	..	..	..	..	..	1.248	0.571	1.746	0.680	0.569	1.397	1.657	3.227
Uzbekistan	..	..	..	..	..	..	..	..	-0.054	0.073	-0.501	-0.159	0.093	0.087
Non-CIS	..	..	..	..	..	..	-0.060	-0.237	-0.236	0.082	0.126	-0.358	0.169	-0.045
Former Soviet Union	5.724	9.612	3.972	-2.697	-5.907	1.255	..	..	..	..	..	..	..	..
Total	-3.351	11.130	8.833	-0.032	-7.583	-3.000	0.227	5.337	12.736	6.634	-3.937	-14.544	-22.185	-0.654*

Source: UN/ECE secretariat, based on national statistical publications and direct communications from national statistical offices.

Note: See appendix table B.11.

[a] Russian Goskomstat data excluding trade by physical persons (shuttle trade), but including trade flows not crossing the Russian borders such as off-board fish sales and natural gas deliveries under debt repayment agreements with former CMEA countries.

APPENDIX TABLE B.14

Merchandise trade of the ECE transition economies by direction, 1980, 1987-1999

(Shares in total trade, per cent)

	1980	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe, *to and from:*														
Exports														
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ECE transition economies	48.5	50.2	46.5	44.4	38.1	28.5	23.0	28.2	26.3	25.8	26.1	26.1	22.5	18.7
Former Soviet Union	27.1	29.7	27.2	25.5	22.3	17.9	12.4	9.8	9.0	8.9	9.4	10.3	7.5	4.7
Eastern Europe	21.4	20.5	19.3	18.9	15.8	10.7	10.7	18.5	17.4	16.9	16.7	15.8	14.8	13.5
Developed market economies	35.7	35.2	38.7	42.6	49.5	59.8	63.0	58.0	62.5	64.5	65.0	66.4	71.4	75.2
Developing economies	15.8	14.6	14.8	13.0	12.4	11.7	14.0	13.8	11.2	9.7	8.9	7.5	6.0	6.0
Imports														
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ECE transition economies	42.0	45.6	40.5	36.4	26.6	25.5	24.7	29.3	26.1	25.3	23.8	22.1	18.3	17.7
Former Soviet Union	26.8	30.7	26.3	23.5	18.3	20.2	17.9	16.5	14.1	13.2	12.7	11.2	8.6	8.4
Eastern Europe	18.8	20.5	19.6	18.7	14.3	8.1	6.8	12.8	12.0	12.1	11.1	10.9	9.6	9.1
Developed market economies	38.7	36.1	41.1	44.0	53.3	58.3	64.4	61.5	65.0	65.8	66.6	68.1	72.5	73.0
Developing economies	19.3	18.3	18.4	19.5	20.1	16.1	10.9	9.2	9.0	8.9	9.6	9.8	9.2	9.3
Former Soviet Union/Russian Federation, *to and from:*														
Exports														
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ECE transition economies	34.5	33.5	29.4	26.6	21.8	25.9	22.3	18.1	15.1	16.8	18.2	19.5	18.1	18.1
Eastern Europe	34.5	33.5	29.4	26.6	21.8	25.9	20.7	16.8	11.7	13.2	14.3	14.9	14.2	13.5
Developed market economies	42.2	35.3	38.9	41.8	49.5	56.5	57.9	59.7	66.6	60.6	58.1	58.6	60.0	57.6
Developing economies	23.3	31.2	31.7	31.6	28.7	17.6	19.9	22.2	18.3	22.6	23.8	21.9	21.9	24.3
Imports														
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ECE transition economies	31.5	38.2	32.4	27.6	24.7	26.0	15.9	10.6	14.1	15.5	12.6	13.7	11.9	9.6
Eastern Europe	31.5	38.2	32.4	27.6	24.7	26.0	15.0	10.0	11.7	12.4	10.6	11.1	9.8	8.3
Developed market economies	46.4	40.7	46.3	50.1	52.9	58.1	62.4	60.6	70.3	69.5	67.8	68.3	68.2	68.2
Developing economies	22.1	21.1	21.3	22.3	22.4	15.9	21.7	28.8	15.6	15.0	19.6	18.0	19.9	22.2

Source: UN/ECE Common Database, derived from national statistics.

Note: Data for 1980-1990 refer to the east European CMEA countries (Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland and Romania) and to the former Soviet Union. Trade data in national currencies were revalued at consistent rouble/dollar cross-rates (see the note to appendix table B.11). For 1991-1997, eastern Europe covers Bulgaria, former Czechoslovakia (from 1993, Czech Republic and Slovakia including their mutual trade), Hungary, Poland and Romania, and the second panel reflects non-CIS trade of the Russian Federation only.

Partner-country grouping has been recently revised with subsequent revisions back to 1980. Thus, the earlier reported "Transition economies" group is now replaced by "ECE transition economies", which covers the Baltic states, CIS and the east European countries including the successor states of the former SFR of Yugoslavia. The "Eastern Europe" partner-group now covers Albania, Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia and the successor states of the former SFR of Yugoslavia, which earlier were in the "Other socialist countries" subgroup. The rest of subgroup "Other socialist countries", which in previous series covered China, Cuba, Democratic People's Republic of Korea, Mongolia and Viet Nam, is now included in the "Developing countries" group.

APPENDIX TABLE B.15

Exchange rates of the ECE transition economies, 1980, 1987-1999

(Annual averages, national currency units per dollar)

	Unit[a]	1980	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Albania	lek	..	..	..	..	8.90	24.20	75.03	102.06	94.62	93.14	104.33	148.93	150.63	137.69
Bulgaria	lev	0.86	0.87	0.83	0.84	0.79	17.45	23.42	27.85	54.13	67.08	177.88	1 681.87	1 760.37	1 836.38
Czechoslovakia	koruna	5.37	14.79	14.37	15.06	18.56	29.56	28.30	..	..	..	..	..	..	..
Czech Republic	koruna	..	..	..	..	..	..	..	29.15	28.79	26.54	27.14	31.70	32.29	34.57
Slovakia	koruna	..	..	..	..	..	..	..	30.80	31.93	29.71	30.68	33.62	35.23	41.36
Hungary	forint	32.64	46.97	50.41	59.07	63.21	74.73	78.98	91.91	105.11	125.69	152.65	186.79	214.40	237.15
Poland	zloty[b]	3.05	265.08	430.64	1 439	9 500	10 576	13 627	18 136	22 723 │	2.42	2.70	3.28	3.49	3.96
Romania	leu	4.47	16.00	16.00	16.00	22.43	71.84	307.98	760.12	1 654	2 033	3 085	7 183	8 876	13 983
Yugoslavia (SFR)	dinar[c]	24.64	737.00	25 239	28 760 │	11.32	19.64	..	..	..	..	..	..	..	..
Bosnia and Herzegovina	dinar	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Croatia	kuna[d]	..	..	..	..	..	18.80	264.30	3 577.63 │	6.00	5.23	5.43	6.10	6.36	7.11
Slovenia	tolar	..	..	..	..	..	27.57	81.29	113.24	128.81	118.52	135.37	159.69	166.13	181.77
The former Yugoslav Republic of Macedonia	denar[e]	..	..	..	..	..	19.69	508.07 │	23.26	43.25	38.05	39.92	50.40	54.48	56.90
Yugoslavia	dinar[f]	..	..	..	..	..	19.64	508.07	..	..	4.74	4.96	5.72	9.23	..
Estonia	kroon[g]	..	..	..	..	..	..	12.11	13.22	12.98	11.46	12.03	13.88	14.07	14.68
Latvia	lats[h]	..	..	..	..	..	..	..	0.67	0.56	0.53	0.55	0.58	0.59	0.59
Lithuania	litas[i]	..	..	..	..	..	..	..	4.37	3.98	4.00	4.00	4.00	4.00	4.00
Armenia	dram	..	..	..	..	..	..	..	8.66	288.35	405.93	413.47	490.70	505.78	534.69
Azerbaijan	manat	..	..	..	..	..	..	..	..	1 169	4 417	4 295	3 987	3 869	4 132
Belarus	rouble[j]	..	..	..	..	..	..	..	2 177 │	4 017	11 538	13 472	26 729	58 971	267 750
Georgia	lari[k]	..	..	..	..	..	..	..	..	1.10	1.29	1.26	1.30	..	..
Kazakhstan	tenge	..	..	..	..	..	..	..	..	35.54	60.95	67.30	75.43	78.26	119.44
Kyrgyzstan	som	..	..	..	..	..	..	..	..	10.86	10.83	12.81	17.37	21.37	39.73
Republic of Moldova	leu	..	..	..	..	..	..	..	..	4.07	4.50	4.60	4.62	5.37	10.52
Russian Federation	rouble[l]	0.65	0.63	0.61	0.63	0.59	1.74	192.75	927.46	2 204	4 559	5 121	5 785 │	9.71	24.62
Tajikistan	rouble	..	..	..	..	..	..	..	..	..	107.59	292.89	560.64	..	1 235.57
Turkmenistan	manat	..	..	..	..	..	..	..	..	19.50	110.42	3 509	4 143	..	5 200
Ukraine	hryvnia[m]	..	..	..	..	..	..	..	4 796	31 700	147 314 │	1.83	1.86	2.51	4.13
Uzbekistan	sum[n]	..	..	..	..	..	..	..	932.15 │	9.96	29.81	40.15	66.43	..	124.64
Memorandum item:															
Former GDR	mark[o]	3.30	8.14	8.14	8.14	8.14	1.66	1.56	1.65	1.62	1.43	1.50	1.73	1.76	..

Source: UN/ECE Common Database, derived from national, IMF and CIS statistics. Annual averages are unweighted arithmetic averages of monthly values. Change or redenomination of currency is indicated by a vertical bar.

Note: Under the central planning system with its state foreign trade monopoly, exchange rates served primarily statistical and accounting purposes (notably the conversion of foreign trade values for statistics expressed in domestic currency), without direct impact on domestic price formation. Market-based exchange rates and a meaningful link to domestic currency values emerged only with the transformations from 1989 onward. The official exchange rates of the earlier period are therefore not suitable for the conversion to dollars of macroeconomic and other data of these countries expressed in domestic currency. These strictures should be kept in mind in the interpretation and use of the data for the 1980s shown above.

[a] Currency unit of the last period shown. For prior periods, see footnotes.

[b] The zloty was redenominated at 1:10,000 from 1 January 1995.

[c] The dinar was redenominated at 1:10,000 from 1 January 1990.

[d] The kuna replaced the Croat dinar on 3 May 1994 at 1:1,000; the 1994 average is shown in kuna terms.

[e] The denar (which had replaced the Yugoslav dinar 1:1 on 26 April 1992) was redenominated 1:100 on 1 May 1993; the 1993 average is shown in terms of that unit.

[f] The dinar was further redenominated on 1 July 1992 (1:10), 1 October 1993 (1:1 million), 1 January 1994 (1:1 trillion) and 24 January 1994 (1:13 million). Average annual exchange rates not available for 1993-1994.

[g] The kroon replaced the Soviet rouble in June 1992 with a peg to the deutsche mark (8:1); the average shown for 1992 refers to June-December.

[h] The lats replaced an earlier Latvian rouble at 1:200 on 18 October 1993; the 1993 average is shown in lat terms.

[i] The litas replaced the earlier talonas at 1:100 on 1 June 1993; the 1993 average is shown in litas terms.

[j] The Belarus rouble was redenominated 1:10 on 10 August 1994; the 1994 average here assumes this applied to the entire year. Annual averages were calculated from end-of-period monthly rates.

[k] The lari replaced the lari-kupon on 25 September 1995; the annual average for 1994 is shown in million lari-kupon, and that for 1995 in lari.

[l] 1980-1991: Soviet rouble/dollar rate used in the conversion of foreign trade data for statistical purposes. The rouble was redenominated at 1:1,000 from 1 January 1998.

[m] The hryvnia replaced the former karbovanets on 2 September 1996 at 1:100,000; the average for 1996 is shown in hryvnia terms.

[n] Sum-kupon in 1993.

[o] German Democratic Republic mark through 1990, deutsche mark thereafter.

APPENDIX TABLE B.16

Current account balances of the ECE transition economies, 1990-1999

(Million dollars)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe [a]	-5 639	-2 147	-909	-7 896	-2 705	-1 836	-13 523	-15 071	-17 611	-20 333
Albania	-118	-168	-51	15	-157	-12	-107	-254	-45	-155
Bosnia and Herzegovina	..	..	..	..	-177	-193	-748	-1 060	-1 098	-2 191
Bulgaria	-1 710	-77	-361	-1 098	-32	-141	-57	367	-61	-686
Croatia [b]	-621	-589	329	623	853	-1 442	-1 091	-2 325	-1 530	-1 523
Czech Republic	-122	1 708	-456	456	-787	-1 369	-4 292	-3 211	-1 336	-1 029
Hungary [c]	127	267	324	-3 455	-3 911	-2 480	-1 678	-981	-2 298	-2 076
Poland [c]	716	-1 359	-269	-2 868	677	5 310	-1 371	-4 312	-6 858	-11 569
Romania	-3 254	-1 013	-1 506	-1 174	-428	-1 774	-2 571	-2 137	-2 968	-1 296
Slovakia	-767	-786	173	-601	665	391	-2 098	-1 952	-2 059	-1 083
Slovenia [b]	518	129	926	192	573	-99	31	11	-147	-783
The former Yugoslav Republic of Macedonia [b]	-409	-259	-19	15	-158	-222	-289	-276	-308	-135
Yugoslavia	..	..	..	..	-400	-1 037	-1 334	-1 555	-1 180	-1 220
Baltic states	..	..	548	353	-59	-788	-1 400	-1 890	-2 426	-2 134
Estonia	..	..	36	22	-167	-158	-398	-563	-478	-294
Latvia	..	..	191	417	201	-16	-279	-345	-650	-646
Lithuania	..	..	321	-86	-94	-614	-723	-981	-1 298	-1 194
CIS	..	..	..	10 267	5 700	5 032	6 946	-3 606	-6 385	23 732
Armenia	..	..	..	-67	-104	-218	-291	-307	-403	-307
Azerbaijan	..	153	488	-160	-123	-319	-821	-915	-1 363	-600
Belarus	..	..	131	-435	-444	-458	-516	-788	-866	-257
Georgia	..	..	-248	-354	-277	-216	-275	-375	-417	-195
Kazakhstan	..	-1 300	-1 900	-641	-905	-213	-751	-799	-1 225	-171
Kyrgyzstan	..	..	-61	-88	-84	-235	-425	-138	-371	-185
Republic of Moldova	..	..	-152	-155	-82	-95	-192	-275	-323	-23
Russian Federation [d]	-6 300	2 500	1 142	12 792	8 850	8 025	12 448	2 545	1 040	25 301
Tajikistan	..	..	-53	-208	-170	-89	-70	-56	-107	48
Turkmenistan	-308	447	926	776	84	23	2	-580	-934	-700
Ukraine	..	..	-526	-765	-1 163	-1 152	-1 184	-1 335	-1 296	834
Uzbekistan	..	..	-236	-429	118	-21	-980	-584	-122	-14
Total above [a]	..	..	..	2 723	2 936	2 407	-7 977	-20 567	-26 423	1 264
Memorandum items:										
CETE-5	473	-41	698	-6 277	-2 783	1 753	-9 408	-10 445	-12 698	-16 539
SETE-7 [a]	-6 112	-2 106	-1 607	-1 619	78	-3 589	-4 115	-4 626	-4 913	-3 794
Asian CIS	..	..	..	-1 170	-1 461	-1 288	-3 611	-3 754	-4 941	-2 124
Three European CIS [e]	..	..	-547	-1 356	-1 689	-1 705	-1 892	-2 397	-2 484	555

Source: National balance of payments statistics; IMF.

[a] Totals excluding Bosnia and Herzegovina and Yugoslavia.

[b] Excludes transactions with the republics of the former SFR of Yugoslavia: Croatia (1991-1992), Slovenia (1990-1991) and The former Yugoslav Republic of Macedonia (1990-1992).

[c] Convertible currencies. Hungary until 1995; Poland until 1992.

[d] 1990-1992 excluding transactions with the Baltic and CIS countries.

[e] Belarus, Republic of Moldova and Ukraine.

APPENDIX TABLE B.17

Inflows of foreign direct investment[a] in ECE transition economies, 1990-1999

(Million dollars)

	1990	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*
Eastern Europe [b]	479	2 332	3 124	4 165	3 575	9 230	7 974	9 400	14 270	17 361
Albania [c]	..	–	20	58	53	70	90	48	45	41
Bosnia and Herzegovina	..	..	..	..	–	–	–	–	100	60*
Bulgaria [c]	4	56	42	40	105	90	109	505	537	806
Croatia	–	–	16	120	117	115	506	530	898	1 408
Czech Republic	132	513	1 004	654	869	2 562	1 428	1 300	2 720	5 108
Hungary	311	1 459	1 471	2 339	1 146	4 453	2 275	2 173	2 036	1 944
Poland (cash basis) [c]	10	117	284	580	542	1 132	2 768	3 077	5 129	6 471
Romania	–	40	77	94	341	419	263	1 215	2 031	1 041
Slovakia	18	82	100	168	250	202	330	161	508	330
Slovenia	4	65	111	113	128	177	194	375	248	181
The former Yugoslav Republic of Macedonia [c]	–	–	–	–	24	9	11	16	118	30
Yugoslavia	..	..	..	..	..	..	..	740	..	..
Baltic states	..	..	119	238	460	454	685	1 142	1 863	1 139
Estonia	..	..	82	162	215	202	151	267	581	305
Latvia	..	..	29	45	214	180	382	521	357	348
Lithuania	..	..	8	30	31	73	152	355	926	486
CIS	..	..	..	1 875	1 720	3 969	5 188	10 611	6 733	6 599
Armenia [c]	..	..	..	1	8	25	18	52	221	122
Azerbaijan [c]	..	..	–	60	22	284	627	1 115	1 024	510
Belarus	..	..	7	18	11	15	73	200	149	225
Georgia [c]	..	..	–	–	8	6	40	203	265	82
Kazakhstan [d]	..	..	100	228	635	964	1 137	1 321	1 151	1 584
Kyrgyzstan [c]	..	..	0	10	38	96	47	83	109	36
Republic of Moldova	..	25	17	14	12	67	24	76	81	34
Russian Federation [c]	–	100	1 454	1 211	640	2 016	2 479	6 639	2 761	3 309
Tajikistan [c]	..	..	9	9	12	20	25	30	24	21
Turkmenistan [c]	–	–	11	79	103	233	108	102	64	60*
Ukraine	..	..	170	198	159	267	521	623	743	496
Uzbekistan [c]	..	..	9	48	73	-24	90	167	140	121
Total above [b]	..	..	..	6 278	5 756	13 653	13 847	21 153	22 866	25 098
Memorandum items:										
CETE-5	475	2 236	2 970	3 853	2 935	8 526	6 995	7 087	10 641	14 034
SETE-7 [b]	4	96	155	312	640	704	979	2 313	3 629	3 326
Asian CIS	..	..	..	435	899	1 605	2 092	3 073	2 998	2 535
Three European CIS [e]	..	..	194	229	181	349	617	899	974	755
Poland (accrual basis)	89	291	678	1 715	1 875	3 659	4 498	4 908	6 365	7 270

Source: National balance of payments statistics; IMF.

[a] Inflows into the reporting country.

[b] Excluding Bosnia and Herzegovina.

[c] Net of residents' investments abroad. Bulgaria, 1990-1994; Poland, 1990-1992.

[d] Drawings less repayments.

[e] Belarus, Republic of Moldova and Ukraine.

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Printed at United Nations, Geneva
GE.00-24541-December 2000-4,185

ECE/EAD/00/4

United Nations publication
Sales No. E.00.II.E.28

ISBN 92-1-116767-1
ISSN 0070-8712

W7-COI-459